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ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 1.

HATHORNE, MASS., MAY, 1919.

No. 1

AN INDISPENSABLE FARM PRODUCT

Both farmers and consumers in Essex County note with satisfaction the movement now being carried on by the N. E. M. P. A., dealers and consumers in Lawrence, Haverhill and other cities to advertise and increase the consumption of milk. There is no more essential industry for the health and prosperity of our people, city dweller and farmer alike, than dairying. Without dairying the fertility of our farms decreases, and without an abundant supply of fresh milk the health of our people deteriorates.

Essex County should produce and consume more milk.

The advantages of such a plan are self evident. It would mean to the consumer clean milk, produced under the supervision of city inspectors and delivered before it is twenty-four hours old. It would mean to the farmer a permanent agriculture.

Milk comes nearest of all foods to being a complete diet. Here are a few points which it is well to bear in mind:

1. Milk will take the place of meat. One quart of milk will supply as much protein as a ½ pound of lean beef. With milk selling at 16c. a quart, and beef at 45c. a pound, this is a financial economy worth considering. Skim

(Continued on page 4)

ESSEX COUNTY BOARD OF TRADE

The Essex County Associated Boards of Trade are undertaking a very progressive movement, looking toward co-operation with the agricultural interests of the County. On the first of the year President Ward appointed a large committee on agriculture with Mr. H. W. Pelton of Lynn chairman. The committee has held several meetings and is already taking up matters of mutual interest to agricultural and manufacturing industries of the County. Several sub-committees have been appointed and are at work upon active plans. One of the most important projects is that of studying the needs for cold storage for farm products. It is hoped and believed that several plants may ultimately be erected, so placed as to be of the greatest use to the farmers. Other considerations will be accessibility to railroad and to improved highways. It would indeed seem that a splendid era is opening up when business men and farmers are cooperating to solve some of the big food problems which are facing us at the present time.



ESSEX COUNTY AGRICULTURAL SCHOOL

ANNIHILATE THE APPLE APHIS

Owing to the mild weather the apple Aphis or plant louse has appeared in hordes. The buds and leaves of fruit trees all over the county are covered with millions of these little sucking insects. Prof. H. T. Fernald of the Massachusetts Agricultural College, a noted authority on insects, warns us against a probable severe attack of the potato louse. Start in now to fight these serious pests. A spray made from 40% Sulphate of Nicotine at the rate of ½ pint to 50 gallons of water is one of the most satisfactory methods of control. Spray thoroughly as each louse must be hit to kill. Get in your supply of Nicotine or Black-Leaf-Forty before there is a shortage.

1200 ACRES OF SALT MARSH TO BE RECLAIMED

The owners of a large area of salt marsh in Salisbury have applied to the County and State authorities for permission to build a dike which will prevent the sea from flooding about 1200 acres of good hay land. The increased value of the land would much more than pay for the cost of the dike and tide gates. The active workers in Salisbury are A. W. Bartlett, J. Q. Evans, and others, while the State Department of Agriculture, the street railway, and Messrs. Smith and Gaskill of the County Agricultural School, are cooperating in the undertaking.

WANTED — Steady, experienced married farm hand for permanent job. Nice tenement. Good wages. Andrew Longfellow, Groveland, or Farm Bureau, Hathorne.

ADVISORY COUNCILS MERGED

At a recent meeting of the Board of Trustees of the Agricultural School the Advisory Councils of the School and Farm Bureau were merged. The Council in charge of the women's work, both the homemaking work in the school and the home demonstration work over the County will consist of Mrs. R. S. Bauer of Lynn, Mrs. G. W. Cressy of Salem, Mrs. Lawrence Dodge of West Newbury, Miss Gertrude Emery of Lynnfield, Mrs. C. H. Kitchin of Methuen, Miss D. MacBrayne of Lawrence, Mrs. C. H. Preston of Danvers, Mrs. C. W. Paul of No. Andover, Mrs. T. D. Paul of Gloucester, Mrs. R. S. Russell of Boston, Mrs. J. W. Ross of Ipswich, Mrs. J. J. Shanahan of Peabody, Mrs. Hooper Shaw of Marblehead.

The Advisory Council for the boys' school and the Farm Bureau will be Messrs. L. G. Dodge of West Newbury, G. L. Averill of West Andover, H. A. Harrington of Peabody, Elbridge Noyes of Newbury, J. K. Sargent of Merrimac, A. F. Learoyd of Danvers, J. N. Dunmer of Rowley, Stuart Little of Newburyport, H. R. Williams of Wenham, J. D. Barnes of Wenham, J. A. Pitman of Salem, H. W. Pelton of Lynnfield, T. F. Waters of Ipswich, Dr. J. B. MacDonald of Danvers, E. L. Haynes of Methuen.

It is felt that this action will tend to unify the plans of the school at home and throughout the County.

FOR SALE—Two or three splendid large farms for sale in Essex County. Good soil and near fine markets. Inquire of Farm Bureau office, Hathorne.

ESSEX FARMER and HOMEMAKER

HATHORNE, MASS.

Published by the Trustees of the Essex County Agricultural School.

A MONTHLY PUBLICATION

SUBSCRIPTION FREE

Persons desiring this publication should address The Agricultural School, Hathorne, Mass. Application has been made for this paper to be entered as second class matter at the Postoffice at Hathorne, Massachusetts, under the act of August 24, 1912.

CALENDAR OF COMING EVENTS

May 1—Essex County Pomona Grange No. 2, Salisbury. Program: A Home Makers' Convention. A. M. Addresses: "Child's Welfare," Miss Ellen M. Atchinson, Miss Alzira W. Sandwall, Public Instructors. P. M. Addresses: a. "Our Food, Flour and Meal," J. N. Dummer of Glen Mills Cereal Co. b. "Meats; How and What to Buy?" Representative of Swifts' Wholesale Beef Co. c. "Fish; How Caught and Cured," Mr. E. K. Burnham, Gloucester wholesale fish dealer. Entertainment by the Salisbury Grange.

May 6—Annual Meeting of Essex County Cooperative Farming Association, Topsfield at 4 p. m. All interested farmers invited.

May 9—Annual Convention of Vocational Teachers. The Women's Section will be held at the Girls' Trade School, Massachusetts Ave., Boston. The sessions will be open to all women interested in the work of our Home-making Schools.

May 10—High School Day at the Massachusetts Agricultural College, Amherst, Mass. Students and teachers invited. Program: Forenoon, 9 to 12, Registration and Inspection of the College. 12.00, Luncheon. Afternoon, 1.00, Military Parade. 1.45, Interscholastic Track Meet. 4.00, High School Baseball Game. 6.00, Complimentary Supper, Draper Hall, followed by short program of speaking. Evening, 8.00, Concert in Auditorium by the Musical Clubs. 9.30, Fraternity Reception. Write R. J. Watts, Amherst, for details.

May 21—Chebacco Pomona Grange No. 26, Topsfield. Program: 10.30 a.m. How can stormy days be made profitable by the farmer? Five minute papers in charge of Elmer E. Allen. How made profitable by the housekeeper? Papers in charge of Sophie M. Cole. 2. p. m. Conferring the Fifth Degree in full form. Inspection by Deputy Peter I. Adams. Entertainment by Topsfield Grange.

May 22—Middlesex Essex Pomona Grange, North Reading.

"Pigs is Pigs," as was the case last year. Good growing 6 weeks' old pigs are selling for \$8 to \$10 each, and why shouldn't they with grain and labor as high or higher than last year.

WITH THE STUDENTS AT ESSEX "AGGIE"

Agricultural Department.

The class work for the agricultural department closes on May 9th in order that the students may pursue their project work with increased vigor.

A group of students with Instructors Cole and Hammond recently visited Boston in order to visit the Faneuil Hall Market and several implement and seed stores.

Instructor Davenport and his fruit classes have spent the past month in pruning, spraying, grafting and planting orchards in different parts of the county.

Gilbert Tucker of Beverly has been elected Supervisor of Garden Work at Methuen.

Mr. W. C. Kennedy, Instructor of Animal Husbandry of the school, has taken up his new duties in the Winstead, Conn., High School. His many friends wish him success in his new field.

Mr. John S. Carver, formerly of this school but recently Extension Poultry Specialist for the Maine State Agricultural College, is to return to us on May 15. He will again take charge of the Egg Laying Contest and the poultry work at the school, for which he is so ably fitted.

Saul Freedman, '17 is at present doing cow testing work for advanced registry in the service of the Massachusetts Agricultural College. He will enter the Veterinary College of Ohio State University in the fall.

David Abbot is located on the large farm specializing in Ayrshire cattle and sheep. His mail address is Greenfield, N. H.

Homemaking Department.

The girls of the two upper classes are enthusiastic over the opportunity given them to assist in the Child Welfare work in Salem, carried on at seven stations in the city. Babies from three months to five years are brought in, the girls help to weigh and measure them and keep the record cards, and Mrs. Roundy, the Child Welfare Nurse, talks with the mothers, giving them advice they wish in regard to diet and care.

There is great rejoicing over the prospect of a tennis net to replace the one destroyed in the Mansion-House fire. The girls served luncheon to the Essex County Board of Trade at its annual meeting, April 3d. The rousing cheers given them afterward took their breath away, and the vote to buy the tennis net left them so speechless that they couldn't even say Come Again. But you can believe they'll be ready to work when the Board of Trade comes next year.

A few women are still sharing the millinery classes with the girls. Last year's enrollment in the extension classes was 12; this year's was 50. It looks as if we might be having a

Mother-Daughter course in Home-making.

The Senior girls are planning a trip to the Massachusetts Agricultural College for the High School Day, Saturday, May 10th. They are to be the guests of the young women students of the College.

ESSEX CROWS AND CACKLES

Since the 15th week the egg production in the Egg Laying Contest at Essex County Agricultural School, has been from 8 to 17 per cent larger than that of the International Contest at Storrs, Conn., which shows that Essex County is breeding as high quality stock as any in the country, and speaks well for the care and management of the contest.

If you haven't your chicks all hatched by the last of April do not think that it is too late to raise more. Profitable chick raising is not limited to early hatches alone, May is one of the best months in the year to get out chicks. It is the time of year called the "natural" hatching season, and conditions are most favorable to the chick raiser. The breeding stock has usually been out on comparatively free range and consequently the fowls will be in the pink of breeding condition. Practically all the eggs will be fertile, the germs vigorous and the hatching percentage high. The chicks will be strong and healthy and everything favorable for their rapid growth.

Avoid over crowding and lack of ventilation. Fast growing chicks soon over crowd their quarters, and where this happens they cease making normal growth, even if many do not actually die of disease. Good ventilation means vigorous, healthy chicks.

Milk is a splendid food for poultry and to a certain extent takes the place of meat foods. It is especially a good food for young chicks, whether it is skimmed, whole, sour or buttermilk.

Don't simply refill the drinking vessels, but wash them thoroughly very often and give them a good scalding at least once a week.

Poultry manure is richer in nitrogen than any other manure on the farm. When mixed with about one half amount of acid phosphate it makes a high grade fertilizer, to be used for field crops, such as corn or in the vegetable garden. Do not mix lime or wood ashes with poultry manure, until the day of using on the ground, as both of them are strongly alkaline and will release the ammonia containing the nitrogen.

Will you pay a dollar a dozen for winter eggs or put them down in water glass as 52c. a dozen? Use water glass at the rate of one part water glass, to ten parts of boiled water. Use fresh, clean, unwashed eggs. A 5 gallon crock will hold 16 dozen eggs and requires a quart of water glass.

With the Farm Bureau

FARM GOSSIP AS HEARD AROUND THE COUNTY

NOTE: Contributions from farmers, agriculturalists, or would be farmers, will be gladly received not later than the 15th of the month preceding publication, for this or any other column of this paper.

The neighbors say that Edson Walker of Merrimack can make his little pigs grow faster than witch grass. Somebody said he used a bicycle pump, but we found that all he does is to give them a little skim milk and middlings. Does anybody know any better feed for young pigs?

County Commissioner J. C. Poor of North Andover, just sold as likely a bull calf as was ever dropped in Essex County, to the Shattuck Farms of Andover. The sire of the calf was Mr. Poor's \$3000 bull, Idllwild Walker King whose dam produced 700 lbs. of 5.2 per cent milk in 7 days and 38.2 lbs. of butter. The dam of the calf is now milking about 80 lbs. per day at two milkings. There ought to be more of this kind in Essex County, and there will be if the quality of the stock that some of our farmers are buying is any index.

That farmers know a good thing when they see it is shown by the way that they are supporting the Essex County Cooperative Farming Association, a stock company of farmers, for farmers and managed by farmers, for the purchasing of farm supplies and selling farm products. Our best farmers are stock holders, and many have recently purchased shares of stock. Since January, Manager Stimson of Topsfield, reports that the Association has handled—40 cars of hay, 30 cars of lime, 24 cars of grain, 6 cars of fertilizer, \$2000 worth of spray materials, and \$1000 worth of hogs, besides a large amount of other work.

The system which has been started of having a local man in each farm community handle the local business of the Association is working very satisfactorily. Attend the annual meeting and get acquainted.

DOES YOUR MONEY HOLD OUT?

Are you keeping household accounts? If so, do they tell you what you need to know or are they just a collection of figures? If you are not keeping accounts don't you often wonder where the money goes and why you have not more to show for what you have spent? A great deal of time and thought has been spent on this subject by Miss Laura Gifford of the Massachusetts Agricultural College. During the week of May 12th Miss

Gifford will be in Essex County and will be glad to meet with interested groups or individuals. If this appeals to you or your neighbors will you not get in touch with the Farm Bureau Chairman in your town, or write directly to the Home Demonstration Agent, Hathorne, that we may arrange a meeting with Miss Gifford. An Account Book particularly adapted to household needs is being published and will be ready for distribution this month. They will cost fifteen cents each. If you care for one of these books please send your name to the Farm Bureau office.

DEMONSTRATION WORK

Fifteen farmers in the County will grow Soy Beans in their silage corn this year as a Farm Bureau demonstration. Did you see the plot that Charlie Gattrell grew on the Moseley Farm, Newburyport, last year? Those who took the farm tour of the County in August saw it, and there were at least 15 other farmers in the County who had good luck with Soys last year. More feed and better feed per acre and soil improvement if you inoculate. Why not try them? Ask the County Agent.

It isn't too late to top dress that mowing field. On a field with a good sod ten dollars' worth of fertilizer should give you at least \$20 worth of hay even at the present price of fertilizer. That isn't much hay right now. A mixture of 150 lbs. Nitrate of Soda and 200 lbs. Acid Phosphate will bring results. Several farmers are running demonstrations with the Farm Bureau this year, using this mixture, and leaving a check plot with no top dressing so that we shall have some facts to give you next fall on yields and profits. Try this chemical top dressing this year and let us know what results you get.

THE TRACTOR DEMONSTRATION

For real tractor performance one of the best demonstrations ever held in the state was held at Hathorne on April 19th. Four different makes of tractors went thru the list of plowing a stony side hill, harrowing and pulling stumps and stones without a flaw. The well equipped Moline could back into the corners as handily as a sulky plow, the little Fordson finished its job in record time and showed lots of pep and power in spite of its size, and the neat International 8-16, with a crack demonstrator, really did the classiest job when it came to plowing. The big Emerson 12-20 pulled three plows on the steepest grade with little effort, while the other machines were pulling two plows. The audience was highly pleased with the work done.

OUR BOYS' AND GIRLS' CLUBS

Essex County is credited with having the first organized Calf Club in the State of Massachusetts. The club is in Gloucester, and is made up of eight boys and one girl. Mr. Philip Tarr is the local leader.

The 'Busy Workers' Home Economics Club, Gloucester, which is led by Mrs. Walter Nickerson, had a sale of club-made products in a store window and with this money enjoyed a happy week's outing at the seashore.

During the month of April the big spring Club Enrollment Drive was carried on in practically every city and town in the county. Fifty schools were visited by the State and County leaders and every boy and girl between the ages of 10 and 18 years had an opportunity to join the Market Garden, Pig, Calf, Poultry and Canning Clubs. Any boy or girl who has not already enrolled in any of the above clubs, and wishes to do so, can get an enrollment card by addressing County Club Leader, Hathorne, Mass.

Miss Madeline Walker of the Beverly Home Economics Club has made 309 loaves of bread in the past three months.

Practically every Poultry Club member in the Essex County contest have set two or more hens with 13 eggs under each hen. This is a record that no other county in Massachusetts holds.

Miss Goodpasture, National Assistant Girls' Club Leader, from Washington, and Miss Norris, State Girls' Club Leader, Massachusetts Agricultural College, paid Essex County Home Economics Clubs a three days' visit recently.

The Pig Club and Canning movie reels have been shown in Topsfield, Hathorne, Amesbury, Haverhill, No. Andover, by State Leaders Howe and Rice from Amherst (M. A. C.) and have proved of great interest.

Master James Tucker, Gloucester, a member of the Sow and Litter Club, has a fine litter of pure-bred Berkshire pigs. James has been offered \$135 for the litter.

The Haverhill Trust Company, Morris Plan Bank, Lynn, Gloucester Safe Deposit and Trust Company, are cooperating with school authorities in financing pig club members in buying their pigs.

SEASONAL NOTES

Seed Potatoes should be treated before planting to prevent disease. Corrosive sublimate at the rate of 14 oz. in 30 gal. water is very effective for control of scab, black scurf and other diseases. Soak potatoes 30 min. in a wooden vessel. It is a deadly poison so care should be used.



GROUP OF OUR PIG CLUB MEMBERS.

PERSONALS

Homemaking Department.

Deep grief came to the upper class girls and to the graduates of the Homemaking Department in the announcement of the death of Mrs. John S. Carver on March 27th.

She was Louise Brown of the class of 1919, and was married last June. She had been living in Orono, Maine, where Mr. Carver was extension professor in the Poultry Department of the University of Maine.

Mildred Annan, '17 has been instructor in millinery for the extension classes of the Farm Bureau in Saugus, Marblehead and Andover. One hundred and fifty-seven hats were made in her classes at an average cost of \$2.38. She gave a millinery demonstration during Farmers' Week at the Massachusetts Agricultural College.

Elinor Ward, '19 has joined the girls of the Farm Unit on the Crane Farm at Castle Hill, Ipswich. She is to do the cooking for the unit until next November.

Evelyn Bodge, '18 and Helen Lewis, '20 are teaching cooking classes one afternoon a week at the Community House in Peabody.

Doris Perry has been working at Lang's Millinery Shop in Salem since early in February.

Dorothy Hodge, '19 carried on the work in the boys' lunch room during the spring vacation in the Homemaking Department.

Marion Stockbridge, who has been attending the Gordon Bible School in Boston this year, is acting as Pastor's Assistant in the Baptist Church at Danvers.

Edith McCormack, '16 was married on February 8, 1919 to Horace J. Baldwin.

The engagement is announced of Ruth Burbeck to Ernest Frye of Lynn.

Doris Greene was married on January 30, 1919 to Ernest Howard, '18. They are living at Ocean Terrace, Salem.

"ESSEX AGGIE" HAS ENVIABLE SERVICE RECORD

Killed in Action

Mortimer Robbins, Nahant.
James A. Wood, Topsfield.
Abraham Fiske, Cliftondale.

The School reveres the memory of these young men whose courage and devotion led them to make the supreme sacrifice.

Over seventy students and graduates were enrolled in the Service.

26th Division:—Earle Grant, Leonard Ives, Enfield Plummer, Elliot Prime, George Barlew, Reginald Harrison, Charles Gordon, Elforest Kimball.

These boys served mostly in the artillery. It is rumored that one has received a decoration for conspicuous bravery.

1st Division:—Cogswell of Essex and Herrick of Gloucester.

Canadian Forces:—Mortimer Robbins, A. S. Coughlan, Beverly; Parker Bradley, Danvers; William Etheridge, Salem.

Navy:—J. H. Lovett, G. Woodberry, H. Ricker, S. Loring, Page Bates, Submarine Chaser 181; Donald Snow, France and South America; Fred Johnson, Salem, Naval Gun Crew.

Mel Grey of Beverly is now an agricultural instructor in the U. S. Army School in France. Chapman and Plummer have written home interesting letters describing agriculture in France.

Prince Woodberry, Beverly, a former student and instructor in the School, is in the Motor Repair Corps, but is anxious to return to agriculture.

Driving tractors prepared some of our boys for handling tanks. Albert Ravell of Lynn and William Lewis of Topsfield served in the "Treat 'Em Rough" brigades.

The School will be grateful for corrections and additional information sent to Director P. A. Smith, Hathorne.

EXCHANGE COLUMN

FOR SALE

Power Spray Outfit—4½ h. p. engine, 200 gal. tank. A1 condition. A. L. Cunningham, Newburyport.

Seed for Sale—Buy Home Grown Seed
3 bu. Bantum Corn, @ \$10 per bu.
5 bu. Yellow Eye Beans @ \$9 per bu.
½ pk. Wardwell's Wax Beans @ \$1.80.
Roy Cushing, Danvers.

Hollow Crown Parsnip Seed @ \$1.50 per lb. Clark Farm, Danvers.

4 bushels Pocohontas Seed Corn @ \$.85. Also, Warren Turban Squash Seed. Walter Brown, W. Peabody.

High Test Spinach Seed. J. O. Goodale, W. Peabody.

Chester White Boar. S. N. Stimson, Topsfield.

Yellow Sweet Corn Seed—We know of several lots of high testing Yellow Sweet Corn, Golden Bantum, Early Yellow Dawn, Red Cob Bantum and De Leus Golden Giant. Most of this corn can be bought for \$8 per bushel. Get in touch with us. Farm Bureau, Hathorne, Mass.

8 weeks' old Chester White Pigs, \$10. S. A. Wing, Hathorne.

AN INDISPENSABLE FARM PRODUCT

(Continued from page 1)

milk and buttermilk are just as good substitutes for meat as whole milk.

2. Milk is the greatest source of calcium, or lime. Calcium is important: it is building material for bones and teeth and regulating material for the body. It is essential that everyone have a supply of lime and particularly babies, growing children and young people. There is little in meat and bread, none in common fats and sugar, because a pint of milk a day will guarantee to a grown person a sufficient amount, and a quart a day will provide for the greater need of growing children.

3. Milk will take the place of bread, butter, sugar, and other foods used chiefly for fuel. A quart of milk will give as much working force as half a pound of bread, one-fourth of a pound of butter, or six ounces of sugar. This is in addition to the other advantages already mentioned.

4. Milk contains the essentials for growth. Experiments with animals have taught us that there are two specific substances, known as vitamins, both of which must be present in the diet if a young animal is to grow. Both are found in milk. For this reason children should have whole milk.

The average city dweller doesn't consume half enough milk.

ESSEX FARMER AND HOME MAKER

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HATHORNE, MASS., JUNE, 1919.

No. 2

THE PROPER HANDLING OF THE STRAWBERRY CROP

Many of us who are able to grow a fine crop of berries do not appreciate the importance of the proper handling of the crop, yet this is one of the most important operations of a successful berry grower.

Are we prepared for the harvest with baskets, carriers, crates, packing shed, etc.? They should be attended to at once. Have we arranged for pickers, and furthermore have we investigated the market? Get in touch with the buyers and sellers and hear their suggestions on the proper packing and shipping of the fruit; they know.

A good field foreman is essential, to assign pickers to definite rows, to see that the berries picked are picked clean (missed berries may be over-ripe by the next picking). Keep your standard of quality high. See that soft, over-ripe, or small and half-green berries as well as nubbins do not get in the basket. Only good sized, firm, well colored berries should be put in the box—the kind you would be willing to stand behind. See that the boxes are well filled, look out for the corners, have top levelled slightly higher than side of basket. Layer the top as far as possible by laying berries on their sides so that part of the hull shows. This makes an attractive box. Keep

(Continued on page 3)

A NEW METHOD OF CANNING STRAWBERRIES

(Miss Stratton)

Shall we sterilize or pasteurize our strawberries when we can them this spring? It has been claimed that pasteurized fruits would not float. This is not true. But we do know that pasteurized fruits keep the raw flavor even better than those sterilized. They are not really cooked but are heated to a temperature of 175 to 180 degrees for from 30 minutes to one hour. This prevents the development of moulds and preserves the product from spoilage.

The syrup for strawberries should not be heavy and rich. Too much sugar causes the fruit to shrivel and float to the top of the jar; also the fruit is toughened and the natural fruit flavor lost. The proper amount of sugar will not, as a rule, shrivel the fruit, and it will develop the highest fruit flavor. In canning your strawberries this year try using one part

(Continued on page 3)



VIEW OF HAVERHILL PUBLIC MARKET.

Producer to Consumer

HAVERHILL PUBLIC MARKET A SUCCESS

History of the Market

From all that can be learned regarding markets in cities and towns in Essex County, the Haverhill Market is undoubtedly one of the most successful, although not quite as presumptuous as some of the others. Its inception came at a time when authorities of state, county, and city were interested in it, although the Haverhill Women's Club, Inc. were directly responsible for its being started in the right direction and a good deal of credit is due them for its subsequent success.

The market was opened early in September, 1917, as members of the Women's Club, with some assistance from the Agricultural Supervisor, had succeeded in having Crescent Place set aside as a market place and had interested some of the farmers in the proposition. The first season, no fees were charged for stands and no definite market days set aside, the producers appearing on any day which seemed most favorable to them. To Miss Bertha Eastman of the Women's Club much credit is due, for this first work of getting the market started and quite a good deal of interest later on. Over 50 farmers used the market place in 1917.

In 1918, plans were made somewhat earlier, and a committee composed of a farmer, a member of the city council, two representatives of the Women's

Club, and the Supervisor, drew up an ordinance for regulating the market and laid plans for the opening and carrying on of the market. A market manager was hired, fees were charged for stands, accounts kept of the amount of produce brought in, and every possible effort made to secure harmony and satisfaction amongst the producers, and between producers and consumers. The market days were Wednesdays and Saturdays, and over \$8000.00 worth of produce was disposed of on the market, no account being kept of the orders taken at the market and delivered between market

(Continued on page 3)

ANNUAL MEETING FARMING ASSOCIATION

A stockholders meeting of the Essex County Co-operative Farming Association was held on May 6th, at the office of the Company at Topsfield. Directors were elected for three years as follows: J. C. Poor of North Andover; R. S. Warner of Ipswich; J. W. Appleton of Ipswich; S. Wellman of Topsfield; and Chauncey Gleason of Haverhill. Various officers presented annual reports. A business of over \$120,000.00 was reported with profit to the Association. Great credit is due to S. N. Stimson the manager, for the results. Immediately after the shareholders meeting the Directors met and organized with the choice of John S. Lawrence president, N. W. Rice secretary, and H. W. Mason as treasurer.

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BOARD OF PUBLICATION

Fred A. Smith, Director.

Ralph H. Gaskill, County Agricultural Agent.

Gladys E. Stratton, Home Demonstration Agent.

Elizabeth C. Jenkins, Home-making Department.

F. C. Roberts, Agricultural Department.

CALENDAR OF COMING EVENTS

June 2, 8 p. m.—Conference on Community Recreation, Assembly Hall, Chamber of Commerce, 126 Washington St., Salem. Local and out of town speakers. Topics: Indoor and Outdoor Recreation. Evening use of Playgrounds, Supervision of Dance Halls.

June 7, 10:30 a. m.—Food Centre, Manchester. Annual meeting Essex County Home Economics Association. Subject, Methods of Improving Household Economics.

June 12, 10 a. m. to 4 p. m.—Canning School, New Methods of Preservation. Essex County Agricultural School.

June 18, 2:30 p. m.—Chebacco Pomona Grange, West Peabody.

June 18—Essex County Agricultural School, Mothers' Day in the Home-making Department. 2 to 6 p. m.—Exhibit of School work in all Classes. The public is cordially invited.

June 20, 10 a. m. to 4 p. m.—Canning School, New Method of Preservation. Essex County Agricultural School.

July 30—Pomona Field Day. Essex County Agricultural School.

July 30-August 1—Seventh Annual Poultry Convention, Massachusetts Agricultural College, Amherst, Mass.

CANNING SCHOOL

Latest Methods of Preservation, Essex County Agricultural School, Thursday, June 12 and Friday, June 20th. Professor Chenoweth of the Massachusetts Agricultural College has been secured for these dates to conduct all day classes in which he will show the use of acids in canning vegetables, the pasteurization of fruits, making jams with varying amounts of sugar, and the making of fruit leathers and pastes. Classes must be limited in numbers. If you wish to attend these classes, please notify at once Miss Gladys E. Stratton, Emergency Home Demonstration Agent, Hathorne.

FIELD CROPS FOR POULTRY FARMS. PROPER DIVERSITY GIVES UNIFORM DISTRIBUTION OF LABOR AND LESSENS

It is true that there are many farm flocks in Massachusetts, yet the tendency now is, and has been for some years past, towards the development of plants more or less intensive in their nature and operation. Often they have been called "factories" for the conversion of western grains and bi-products into eggs and poultry.

During the war emergency their fate was problematical. When feed prices climbed and eggs still remained at a low level many plants—those poorly managed never having a wide margin of profit—were forced to quit. Others survived and for the year past report the greatest profits in their existence. While the cost of feeding increased greatly the returns above feed cost practically doubled, that is, after paying feed costs poultrymen had twice as much margin in 1918 as in 1914. It may be that grains will never decline to their former level—perhaps eggs will not either. While the future is not revealed, the outlook is certainly bright.

A Problem in Farm Management

Nevertheless, there is occasion for greater efficiency in poultry farming, not only in the matter of better husbandry of the stock but also in the direction of a better managerial practice which rounds out and develops the entire farming enterprise to its maximum profitability rather than over specializing in poultry or any other single line. The selection of the particular farm projects to furnish this diversity must be determined by the farm and its operator, prevailing economic conditions and the compatibility of the projects, one with another, so as to provide a uniform daily and seasonal distribution of labor and income which will make every day work profitable. There is always work on a farm but much of it is not productive. It should be borne in mind that there is a vast difference between being fully employed and profitably employed. Proper diversity increases the opportunity for profitable employment.

Crops to Grow

In crop production on a poultry farm special consideration might well be given those products which can be marketed thru the birds to reduce the feed bill and the refuse of which may serve as litter. Forage crops rather than grains are, of course, the first consideration. Fall sown rye for early spring pasture, rape, clover and a mixture of oats and peas, are also valuable poultry forage and in addition help to cleanse the land.

The majority of poultry ranges, especially the yards of laying stock, get dry and barren of suitable green feed during the late summer. This is a time when supplementary feeding of green forage is of special advantage in keeping up egg production, grow-

ing chickens and reducing the feed bill. If tender, green pasturage is not available, rape, Swiss chard or fodder corn may be planted in drills close to the yards where it can be cut and thrown conveniently to the birds each day.

For winter feeding succulence is a necessity. Mangels are the most satisfactory crop. One ton to a hundred birds is the average consumption. Of the grains, corn gives the largest yields, constitutes the greatest portion of the ration and requires little special machinery. It has other merits, too, for it uses poultry manure, when supplemented with acid phosphate, to good advantage, the corn field makes an ideal range for chickens and the stalks when cut into short lengths may be used for litter.

—Wm. C. Monahan.

WITH THE STUDENTS AT "ESSEX AGGIE"

Calvin Poor of West Newbury is surely carrying a man's sized project. He has completed a satisfactory farm forestry project; is cost-accounting and caring for his father's herd of cattle; is raising several Berkshire pigs, which he is planning to soil; intends to operate the town sprayer during the spraying season; and in addition he is assisting in the raising of market garden and field crops. He looms big as a Bauer Prize contestant.

Maynard Tucker of Gloucester is a student who does not worry about an eight hour day. He is at it from daylight till dark. He is caring for some swine and poultry, two cows, and four acres of market garden. Incidentally, he is carrying a favorable project in fruit.

Joseph Cashman of Newburyport, one of the first students at the School, was awarded the Croix de Guerre while in France. When the communication service was destroyed, he volunteered to carry messages under heavy fire. Corporal Joe does not have much to say about it other than, "It is all in a day's work."

Edward P. Sweeney, '16 of Gloucester, is making good in the swine industry. He recently sold one hundred and fifty pigs to Pig Club members. He is also doing a big contracting business on private estates along the North Shore.

Luther Martin of Marblehead has a number of acres in market garden that compare favorably with any in the state.

Through a mistake, the name of Frank White of Newburyport was omitted from the service list. He has been with the 104th Artillery Train since last summer, and was the only member of the class of 1918 to see active service in France.

EARLY CUT HAY

Don't wait till the 4th of July to begin haying. Early cut hay means more palatable, easily digested hay that makes milk and on many pieces of land a fine second crop. Try it

FARM GOSSIP

Clinton Goodwin, Garden Supervisor for Haverhill has just distributed 500 grape vines to school children. At this writing we do not know whether he is expecting a visit from Mr. Bryan at some future date, or whether he is preparing for July 1, when the city goes dry. In either case, we believe he has done a good piece of work.

The two granges at West Newbury recently held a joint session to discuss matters for the good of the town, schools, roads, nuisances and farm problems were all thrashed over, and it is believed that some definite results will come from the meeting. Every Grange in the county would do well to follow the example and start a constructive program for town betterment.

James Low of Essex has just bought a handsome Holstein bull calf from I. H. Sawyer, Topsfield, and so the good work goes on. The calf is sired by Mr. Sawyer's wonderful herd bull. If you have never seen this bull it would pay you to take a trip to Topsfield. There is no better looking bull in Massachusetts. Incidentally, Mr. Sawyer has one or two more bull calves to sell.

HAVERHILL PUBLIC MARKET.

(Continued from page 1)

days. The fees charged were not quite sufficient to take care of all the expenses of running the market last year, only 25c-50c being collected from each man for stands the early part of the season. Over 60 farmers used the market at different times during the year and the average consumer attendance was about 500 for each market day.

Plans for 1919 Market

The committee appointed for the emergency period of the war, has gone out of existence and accordingly it was necessary for the first steps to be taken by interested producers and consumers. Early this spring a meeting was called at the Supervisors office for the purpose of ascertaining public sentiment regarding the market. It seemed to be the opinion that the market was a good thing and should be continued. The ordinance governing the market has been changed to meet after war conditions, plans laid for a self-supporting market, calculated to pay the manager and advertising. An organization has been formed called the Farmers' Public Market Association of Haverhill, and every producer who used the market becomes a member of the association and is pledged to support it and to abide by the rulings of the ordinance. A very simple form of constitution and by-laws have been framed and adopted, which seem to meet the situation and allow an elastic and smooth working organization which bids for the success of the market in peace as well as war time.

CLINTON F. GOODWIN,

Agricultural Supervisor,
City of Haverhill.

CANNING STRAWBERRIES.

(Continued from page 1)

sugar and two parts water. Bring this to a boil to dissolve sugar and pour over berries packed in jar. One woman tried packing a few berries and adding syrup, then packing more berries, saying in this way she got in more fruit and had a much smaller space of clear juice in the finished jar.

If you sterilize the jar in hot water bath allow 16 minutes after the water boils. If you pasteurize it, 30 to 45 minutes at a temperature of 180 degrees.

Over Night Method of Preserving Strawberries

1 quart berries.

1 cup sugar.

Allow berries to stand with sugar over night. Pack in hot jar in morning. If not enough juice to fill jar, add boiling water. Sterilize in hot water bath 16 minutes. By this method the berries do not float to top of jar when cooked.

Strawberry Preserves

Start berries cooking with own juice or a little water if necessary. Cook down fairly well and add sugar in the desired quantity, one fourth, one third, or one half the weight or measure of cooked berries. Cook until preserves will stand up well when dipped into a saucer. Remember when adding sugar that it is the fruit flavor you wish to preserve.

—H. D. A.

HANDLING STRAWBERRY CROP.

(Continued from page 1)

all boxes neat and clean, and pack carefully in crates. Keep berries out of the sun and as soon as crates are filled, store in cool place until ready for market. Having properly picked and packed the berries, we need not worry about the selling, for they will sell themselves, at a fine price. One box will sell another, and when we are willing to stand behind our fruit we should have our brand or name stamped on each box and thereby insure a ready market for future crops.

NOTE—Why doesn't Essex County raise more strawberries? We have the soil, climate, etc. and our markets are right at our door. Strawberries bring big returns per acre when properly handled. West Newbury used to be noted for her strawberries. Isn't there a place for an acre or two on many of our farms?

FOR A RAINY DAY

Now is the time to be putting the haying tools and machines into good running order. There are times when it is impossible to work on the land and a few hours spent in examining the haying machines may mean a lot of money saved by and by when sunshine is worth its weight in gold. Look over the mower, rake, tedder, horse fork, etc., and see if you need any repair parts or if any parts are badly worn.

OUR BOYS' AND GIRLS' CLUB

PIG CLUB work in the county has been started in practically every section and already 300 boys and girls have enrolled. Pig club members should have good results this year with their animals as many high grade and pure bred pigs have been purchased by the boys and girls. The County Club Leader has placed 175 pigs in the hands of club members and all have been advised as to the proper feed for young pigs. Last year some members lost their pigs by feeding corn or corn meal to small pigs and so all members are being urged to feed wheat middlings and milk if possible the material and make it. The skirt cost \$5.68 when complete.

Pig Squeals have been held in Lynn, Haverhill and Methuen at which 151 pigs were handed to members. Haverhill is as much alive this year as it was last year in Pig Club work, and Mr. Goodwin the agricultural supervisor and club leader has secured a large enrollment.

Every Pig Club member will be given a 4 oz. bag of rape seed to plant. Experiments have shown that if a pig is fed a large amount of rape the grain bill can be cut one-third. The rape seed is sent to members to grow more pig feed, thus increasing the members profit.

The Home Economics Clubs has been judged and records show that boys and girls who took up this club project have done fine work in bread making, sewing, cooking and household tasks. The 170 bread club members made approximately 8,500 loaves of bread in three months, and the 45 sewing club members have made many servicable garments and have learned to do good patching and darning. The two weeks previous to the closing of the contest, bread and sewing exhibits were held at Haverhill, Amesbury, West Newbury, Lanesville, Gloucester, Manchester, Beverly and Salem, at which the County Home Demonstration Agent did the judging. These exhibits showed that many housewives could get valuable hints from these members.

Essex County is credited as having the largest banner Home Economics Club in the State of Massachusetts. This club is in Lanesville and is led by Mrs. 2 Jones of Cogswell Camp. Thirty-one members enrolled and every one finished all the requirements by keeping records of all work done, writing story of club experience and exhibiting bread or sewing. The club held meetings every two weeks, and these meetings were so interesting and enjoyable that there were very few absences.

ERROR

In the last issue the formula for treating seed potatoes with corrosive sublimate should have been 4 ozs. per 20 gallons, instead of 14 ozs.



FARM TRACTOR AT WORK.

Several tractor sales have been reported recently in Essex County. The demonstration on April 19th showed what could be done on sloping stony land. On farms where the fields are large and the tractor can replace a

pair of horses, as well as fill silo, saw wood and do other jobs, the tractor is economical. There are few farms in Essex County that can afford to own a tractor for plowing and harrowing only, as it means too many idle days for the machine.

HOMEMAKING DEPARTMENT

PERSONAL

Class of 1918

Hope Cook, class president, is employed as payroll clerk at a factory in Haverhill.

Evelyn Bodge of Peabody is at home for the present. This does not mean that she has not been well occupied, for she has had charge of the house-keeping during her mother's sickness, and in her spare moments has been driving her father's truck. She has also been conducting private millinery classes during the winter.

Louisa Russell is employed at the home of Mrs. Charles F. Whitney of Danvers.

Mabel Curtis of Salem has been employed as librarian at the School since her graduation.

The engagement of Edwina Hodges of Marblehead to Irving Libby of Bradford has been announced. Miss Hodges has been working at the Gregory Seed Farm during the winter.

Rachael Foster, '20, has been doing project work as housekeeper for Mrs. William S. Nichols of Andover, while Mr. and Mrs. Nichols were in Boston for the week of the May meetings. During the first two weeks of June she will be a waitress at the Garden Tea-room, Central Street, Andover.

Gertrude Israel, '21, is employed at the home of Mrs. Ralph Gaskill, Danvers.

Viola Haszard, '20, has secured a position for the summer at the Wenham Tea-room.

The engagement has been announced of Elizabeth Palmer, '16, of Peabody, to Edward Robert Little of Brunswick, Maine, Adjutant Captain of the Tech Artillery Corps.

SCHOOL NOTES

HOMEMAKING DEPARTMENT PERSONALS

Mildred Annan, a graduate of the the Lawrence High School in 1913 and of our course in 1917, and Mabel Curtis, Salem High School, 1916, and our course, 1918, are devoting the first two weeks of June to visiting the High Schools in the County. They are to speak to the girls in the graduating classes of the value of the Homemaking course as they see it. This is the first step toward the introduction of a special one year course in Homemaking for High School graduates.

On June 18, the School is planning to hold a Mothers' Day and Exhibit of School Work. The mothers of all girls in school this year have been invited to spend the entire school day with us, and the girls will prepare and serve luncheon to them at noon. In the afternoon an exhibit of school work will be open to the public. A part of the program is a bread contest in which the bread will be judged by Miss Helen Norris, Assistant State Club Leader, M. A. C., who will discuss the points of a good loaf of bread. Miss Louisa Pryor, agent of the State Board of Education, will speak to the mothers on Home Project Work for Girls. Miss Laura Gifford, Extension Service, M. A. C. will speak on Household Accounts, and Miss Gorman of the Danvers State Hospital will use the girls of the School in a home nursing demonstration.

The written reports the girls are making of their work at the Salem Child Welfare Stations show the interest they are taking in that work and the valuable instruction they are receiving from it.

EXCHANGE COLUMN

This service is free; send in your items.

Pure bred Holstein bull calf, six months old, from 30 lb. Colantha Bull, and 27 dam. A fine vigorous calf. —A. V. Phillips, West Peabody.

8 weeks old pigs. Also about 200 fine spring lambs. Will make fine pets. —S. N. Stimson, Topsfield.

A fine Berkshire boar, born last fall. Now ready for service. Longfellow strain. —G. F. Carleton, Rowley.

For Sale: Sixteen grade sheep in fine condition. —J. F. Barr, Essex.

WANTED: Second hand potato sprayer. —Penney Bros., Saugus.

Second hand spring tooth harrow. —Tilton Bros., Topsfield.

SPRAY AND SPRAY AGAIN BUT USE THE RIGHT MATERIALS AT THE RIGHT TIME

Progressive farmers and gardeners have proved to themselves the profitability of proper spraying for insects and diseases. Unless a sufficient study of the proper way to prepare and apply sprays is made, their first attempts have not always been satisfactory.

Both farmers and amateur gardeners should secure Farmers' Bulletin 856, U. S. D. A., Washington, D. C., on "Control of Diseases and Insect Enemies of the Home Vegetable Garden," and Farmers' Bulletin 243 which explains the home mixing and application of Bordeaux mixture.

Considerable controversy has arisen as to which gives the best results, commercial or home made Bordeaux mixture. Farmers should try both noting costs and results.

See that spraying outfits are in working order. Remember the importance of a nozzle that gives a fine misty spray with plenty of power behind it.

The girls of the first year class assisted in weighing and measuring the babies at the Danversport School on May 28.

The Senior Nurses from the Danvers State Hospital are using our school kitchen one afternoon a week for a class in invalid cookery. Miss Hawkes is the instructor.

MODELS

The Farm Bureau has a set of models available to any group who will pay the express one way. The box contains a fireless cooker, iceless refrigerator, blocks for raising working surfaces, ironing board.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 1.

HAWTHORNE, MASS., JULY, 1919.

No. 3

IMPROVED ASPARAGUS.

Asparagus rust, probably the worst enemy which the asparagus growing industry has ever known, reached this country 25 years ago and spread rapidly throughout all the asparagus growing sections. It became so bad in Massachusetts that many growers abandoned the crop, and the others, nearly in despair, organized an association. They sought help from the United States Department of Agriculture and from the Massachusetts Experiment Station which was granted, and an experiment station was established in Concord, Mass. Various lines of attack were pursued, but the one which was finally successful was that of producing a rust resistant strain. This was secured after a few years of pains-taking and scientific work by Prof. Norton, the specialist of the station.

The various strains of this new type, bear the name of Washington, one strain being called Martha and another Mary Washington. One year ago the executive committee of the Massachusetts Asparagus Growers' association intrusted about three pounds of seed to the Essex County Agricultural school. This was sowed on carefully prepared land and the crop received full attention. About 35,000 salable plants were produced. These have been carefully placed on selected farms at various points over the country. It is hoped that within a very few years a large supply of choice seeds and plants will become available for the further extension of this industry.

Asparagus is becoming more popular each year. There has never been a time when it brought such good prices in the market as at present writing. If a large number of good farmers will undertake the growing of this popular vegetable it will be a very easy matter for Essex County to take a leading position in New England asparagus growing.

Will those who are interested in any phase of asparagus growing correspond or put themselves in communication with the Essex County Agricultural School?

DAIRY FARMERS IN SOUTHERN ESSEX COUNTY ORGANIZING.

Under the direction of the local officers of the N. E. M. P. A. and Mr. Charles R. Brown of that organization, the dairy farmers of Southern Essex County are organizing for better market conditions for their milk. The plan which is being carried

(Continued on page 3)



Home Making Department at Essex Agricultural School

MOTHERS' DAY AND EXHIBIT.

On June 18th the mothers of the students inspected the work of the Homemaking Department as shown in an exhibit of cooking, sewing, millinery, textiles and costume design, laundry work, house planning and furnishing.

The girls were the hostesses of the day, conducting the morning assembly and serving a luncheon at noon. At the luncheon Director Smith, Miss Pryor of the State Board of Education and Professor Morris of Harvard University were the speakers. In the afternoon, Miss Laura Gifford, Massachusetts Agricultural College, discussed the keeping of household accounts, and Miss Marion Parker of the Food Centre, Manchester, judged the bread in a bread contest, making the following awards:

First prize, Eleanor Murphy, Georgetown.

Second prize—Edna McKenzie, Danvers.

Third prize—Rachael Foster, Andover.

The prizes were offered by Mrs. R. S. Bauer of the Advisory Council.

A TWO-DAY PRESERVATION SCHOOL.

Prof. Chenoweth of Massachusetts Agricultural College, spent two days in June at the Essex County Agricultural School to talk over and demonstrate to those interested in Preservation the results of experiments carried on at the College, and the latest methods of making jellies, jams, preserves and of canning fruits and vegetables. Some time was spent in talking over methods of drying, the making of butters, leathers and pastes.

ONE YEAR COURSE FOR HIGH SCHOOL GRADUATES.

As a result of the speaking tour of Mildred Annan, '17, and Mabel Curtis, '18, many inquiries are being received about the new course to be offered in September, and registrations have already been made for the work.

In this course, girls can major in either sewing or cooking, giving five half days a week to that subject. Two half days will be given to cooking by

girls who major in sewing and to sewing by the girls who major in cooking. One-half day will be given to each of the following subjects: Home Nursing, Millinery, and House Planning and Furnishing. Home project work will be required to test the girl's proficiency in her chosen subject before a certificate is granted.

ALUMNAE REUNION.

On Thursday afternoon, June 19th, the graduates and Miss Kate Fuller, former Head of the Department, came back to see the exhibit and to talk over the past and future of the Homemaking Course.

Interesting information was gathered about the work of the various graduates—See Homemaking Department Personals. Director Smith spoke of the new course to be offered next year to High School graduates. The present students served sandwiches and ice cream on the lawn of the much loved and greatly mourned Mansion House.

ESSEX FARMER and HOMEMAKER

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

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SUBSCRIPTION FREE

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BOARD OF PUBLICATION

Fred A. Smith, Director.

Ralph H. Gaskill, County Agricultural Agent.

Gladys E. Stratton, Home Demonstration Agent.

Elizabeth C. Jenkins, Home-making Department.

F. C. Roberts, Agricultural Department.

CALENDAR OF COMING EVENTS.

June 30 to July 26—Massachusetts Agricultural College opens its 12th Summer school this year and offers courses in Agriculture and Home Economics. Write John Phelan, director of Short Courses, M. A. C., Amherst, Mass.

July 9-12—Traveling Conference of County Agents and Extension Specialists through Worcester, Middlesex and Essex Counties. July 11th will be spent visiting farms in Essex County.

July 28-Aug. 1—Traveling Conference of Teachers of Agriculture in Eastern Massachusetts. July 29 will be spent at the Essex County School.

July 30—Field day of Pomona Granges of Essex County—Essex Co. Agricultural School. Demonstrations and exhibits of the School and Farm Bureau work.

July 28-Aug. 2—Summer Farmers' Week, Massachusetts Agricultural College.

July 30-Aug. 1—Seventh Annual Poultry Convention—Massachusetts Agricultural College Aug. 9. Junior Field Day for Boys and Girls of Essex County at the County Agricultural School Aug. 9.

WITH OUR BOYS AND GIRLS

The Society for Promoting Agriculture has given Essex County \$100 to be used in club work. A small part of this money will be used in sending a pig judging team to the Eastern States Fair, that will be held in Springfield the coming fall. The greater part of the money will be spent in the distributions of prizes spent in the distribution of prizes in the now active club projects.

AGRICULTURAL SCHOOL NOTES.

T. Richard of Salem, is working at the State Foresters' nursery in Bridgewater. Richy, as he is called by his classmates, is assistant foreman of the nursery. He has charge of the laying out of the nursery beds and the plotting of the species. The nursery contains about 700,000 coniferous transplants. Richard intends to make forestry his life work.

Jacob Begin of Danvers and Charles Vratatos of Salem, are working in the poultry department at the Sorosis farm, Marblehead.

Prince Woodbury, '16, and former instructor, has been working for the government in charge of the European corn borer work in Southeastern Essex County.

Philip Lee of Beverly is getting a lot of experience this summer on the poultry plant of the Applecrest Farm, Hampton Falls, N. H.

John Holmstrom of Salisbury is working on Mr. Davenport's fruit farm in North Grafton.

Byron Raymond is farming on his place in Franklin. Raymond bought the farm before the close of the second term. He is a whole-hearted "back to the land" boy.

The Farm Practice Sheets have been issued to all the students. This sheet is really a score card of their efficiency in the various farm operations. It is as important as a diploma. Each student will be given a final sheet with his rating thereon at the time of his graduation.

The young people of the County who are considering the question of education would do well to investigate what the Essex County Agricultural School can do for them. Here is a splendid and well equipped institution with an ample faculty, situated in the center of the County, which offers free of charge a complete four-years' training in the various branches of agriculture. This opportunity is open to boys and girls between the ages of 14 and 25.

If interested write, phone or call on Fred A. Smith, Director Essex County Agricultural School, Hathorne, Mass. A representative of the school will be pleased to talk the situation over with any person at his home.

DIDN'T FIGURE ON COST.

Before we were married you used to say I should never want for anything.

That's so. But how could I know the cost of living was going to do a skyscraping act.



ESSEX CROWS AND CACKLES

1. Produce Infertile Eggs. Now that the breeding season is over all male birds should be removed from pens. In most cases it will be found advisable to market the males, but if there are some extra good ones to be saved over, they should be kept in separate runs from the hens. You will find the above practice good insurance against so called "rotten eggs" or eggs that have started to incubate. Setting hens or hot summer days will not start infertile eggs to incubate. "Swat the Rooster."

2. Red Mites suck the blood of the birds at night and hide themselves in the cracks and dark places in the house during the day. The mites multiply very rapidly and if not controlled will seriously drain the vitality of your stock. The cheapest and best method of control is to spray roosts, dropping boards, and nests with Crude Petroleum or a mixture of 3 parts kerosene and 1 part crude carbolic acid.

3. Mix Your Growing Mash for Chickens. Keep it before them all the time in self-feeding hoppers from 3 weeks to maturity.

Essex County Growing Mash

200 lbs. Bran

300 lbs. Corn meal

100 lbs. Middlings

100 lbs. Fine Beef Scrap (high grade)

50 lbs. Bone meal.

4. Stop Crowding and get your chickens on the roosts. Avoid those crooked breast bones and backs in pullets this year by getting chickens to roost before they start to crowd badly. A few roosts 12" to 18" from the floor placed in the growing house, will allow a part of the chicks to roost and stop them crowding. Place the roosts in the house as soon as the chickens are feathered out and remove the brooder.

5. Separate Pullets and Cockerels.

If you wish pullets to make their best growth, the cockerels must be removed as soon as their sex can be distinguished, so that the pullets may have sufficient house room and a run to themselves. In most cases it will be found more profitable to market your surplus cockerels as broilers rather than roasters.

6. Summer Boarders. If you are not getting 50% egg production from your flock at this time of year you have some hens that are loafing and should be culled out and sold. If you wish to learn how to select these non-producers from your layers, write to us and arrange to have a culling demonstration on your farm. Grain is high; you cannot afford to board the Non-Producer. Start culling Now!

WITH THE FARM BUREAU

THIRTY-EIGHTH WEEK

REPORT OF FOURTH EGG LAYING CONTEST.

ESSEX COUNTY AGRICULTURAL SCHOOL & ESSEX COUNTY POULTRY ASS'N CO-OPERATING
Hathorne, Mass., Thursday, July 24, 1919

The following table indicates the number of eggs laid in this contest for the week ending Thursday evening as above Also (in the first column) the total number of eggs produced by the pen to date.

Each pen contains ten birds numbered consecutively.

When the pen record shows a greater number of eggs than the totals of the individuals making up that pen, the explanation is that some eggs were laid outside the trapnests and therefore could not be credited to the individual. In each case however, the pen gets the credit for the full number of eggs laid.

Y	W	Pen	Individual Records									
			1	2	3	4	5	6	7	8	9	10
White Leghorns												
1167	51	1 J. F. Crowley, Lynn	6	6	4	4	5	5	4	4	5	5
1423	z56	2 J. Frank Dubois, Lynn	4	5	6	7	6	6	6	4	3	6
1232	45	3 J. F. Crowley, Lynn	2	2	5	5	6	5	5	5	4	5
883	33	4 Upland Farm, Ipswich	5	0	3	4	4	6	4	4	1	0
White Wyandottes												
1219	33	5 T. H. West, Haverhill	2	0	5	6	5	6	0	5	0	4
1126	26	6 T. H. West, Haverhill	3	5	4	0	6	3	0	3	B	1
1332	40	7 J. F. Crowley, Lynn	5	6	B	2	4	3	3	7	6	2
1081	46	8 R. M. Anderson, Freeport, Me.	6	5	4	6	0	6	5	3	5	6
Columbian Wyandottes												
991	45	9 B. F. Waggett, Beverly	7	3	3	6	0	4	5	5	5	0
Barred Rocks												
1129	41	10 R. L. Smith Kennebunkport, Me.	4	7	6	1	2	7	1	2	6	3
789	31	11 Elinor Lord, Danvers	3	0	5	3	0	0	0	7	5	6
1310	39	12 J. Lord, Danvers	6	5	5	3	5	7	B	5	3	B
x1436	47	13 W. W. Lord, Danvers	4	B	7	4	5	6	7	0	6	5
White Rocks												
1058	49	14 Overlook Farm, Haverhill	5	4	3	6	3	6	5	5	5	7
967	38	15 Overlook Farm, Haverhill	4	3	0	5	5	4	5	5	3	1
989	43	16 J. R. Lord, Topsfield	1	5	6	2	3	7	6	6	5	1
Rhode Island Reds												
1112	25	17 A. H. Jackson, North Andover	4	3	0	6	7	0	B	B	1	2
1299	44	18 Wallace Moreland, Salem	5	4	3	6	1	6	6	6	B	6
1144	34	19 J. Lord, Danvers	0	5	7	6	3	M	4	6	1	0
965	27	20 Philip Lord, Danvers	3	0	5	B	3	4	1	0	2	6
984	29	21 A. A. Pembroke, Beverly 2nd year	3	0	3	3	4	0	3	2	6	3
934	24	22 A. A. Pembroke, Beverly	0	2	5	0	0	6	0	0	5	5
989	40	23 W. Lord, Danvers	6	1	1	4	6	0	4	6	6	0
988	44	24 W. H. Ricker, Gloucester 2ndyear	5	5	6	4	4	4	5	4	B	2
1088	41	25 Upham Farm, Byfield	5	2	4	4	6	3	B	B	4	2
27635	971											

Y Pen total to date. W Pen total for week. X Leading pen to date.

Z Highest yielding pen for week. B Broody. M Moulting. D Dead.

55.5 per cent Egg production.

1000

1000

1000

1000

1000

WITH THE FARM BUREAU

ESSEX COUNTY FARMERS BUY FINE AYRSHIRE BULLS. ATTEND NATIONAL SALE AT SPRINGFIELD

Messrs. George Averill of Andover, Chauncey Gleason, Haverhill, and Count Agent Gaskill, attended the annual meeting of the Ayrshire Breeder's Association of America and the National Sale of Ayrshire cattle which was held at Springfield, June 11 to 13. The National sale was the greatest sale of Ayrshire cattle ever held, 44 head of some of the best cattle of the breed in the world sold for an average of \$1,621.00 and one cow brought the record price of \$8,100. It was a liberal education for those who attended to see the type of stock that is making history for one of the greatest breeds of dairy cattle, the Ayrshire. Essex County can well feel proud of the fact that as a result of the trip to Springfield two of the best bulls of the breed are to make their home in this county. Mr. Gleason purchased the bull Netherton Battle Cruiser a half brother to Howies Hot Stuff, the bull that sold recently for \$8,670. Mr. Averill purchased at private sale from the great herd of A. H. Sagendorph, Spencer, Mass., a 16 months' old bull from royal breeding and a splendid type of individual. The purchase of these two bulls will mean much to the dairy industry of the county, as the improvement of the quality of our stock is of the greatest importance in reducing the cost of production of milk. Farmers all over Essex County will watch these bulls with interest and no doubt purchase calves from them for use in their herds. With so many grand bulls of all breeds in Essex County which can be purchased at a reasonable price there is no excuse for using a scrub bull. The risk is too great. The County Agent would be pleased to get in touch with prospective purchasers of pure bred bulls of any of the dairy breeds.

Mr. W. B. Corliss of Andover has recently purchased a splendid Holstein Bull from N. Y. State. He is of Pontiac breeding and will be used on the heifers of his splendid herd bull. Mr. Corliss is building up a fine herd of Holsteins.

FARM BUREAU DEMONSTRATION PLOTS.

If you are interested in growing hay drop in and see the top dressing plots of W. B. Corliss, Andover, A. W. Bartlett & Son, Salisbury, or John McDonald, West Newbury.

CLOTHING PROJECT IN IPSWICH AND ANDOVER

Mrs. Reid, the clothing specialist from Massachusetts Agricultural College, Amherst, has finished the first course with two groups of women in Andover and Ipswich. The women of the original groups are meeting with other women who wish to learn how to draft patterns and make their own clothes by time and labor saving methods. This will mean that when Mrs. Reid is able to return to the towns in which she has given the first course, there will be a large group of women who have learned the preliminary steps and are ready for the advanced course in the fall.

Groups wishing the first course in clothing this coming fall should get their application in early, as the number which can be served will have to be limited.

Mrs. Frank Foster, a member of the Clothing group in Andover, has been putting some of her class work into practice. In looking for a suit this spring, she found those in the stores were high priced and of inferior quality, so she bought her cloth, an all wool serge, used the patterns she had drafted in class and made her suit. Being made from a pattern drafted by her measurements it fits her, she knows she has good material, and the entire cost, trimming, lining and cloth came to less than \$10.14. She could not have obtained as satisfactory or as good looking a suit for \$50. (A waist to go with the suit was also made at home.)

Mrs. Foster belonged to our millinery class this winter, and by using material on hand and putting some new with it obtained a hat which actually cost only 65 cents. This represents a high percentage of saving on one spring wardrobe.

Mrs. Bernard Allen, another member of the clothing class, wanted a satin skirt and went to look for one. The only one suitable cost \$21. Mrs. Allen decided to buy the material and make it. The skirt cost \$5.68 when completed.

SHALL WE CAN OUR FRUITS AND VEGETABLES THIS YEAR?

Now that the war is over shall we spend our time canning? We in this country must look forward to feeding people in other countries this winter the same as last year. Why not make it easier by being sure that we have a sufficient supply of fruits and vegetables on hand to care for our family. A jar of fruit, vegetables and greens for every day in the year this winter. Although the county was quite thoroughly covered by can-

WITH OUR BOYS' AND GIRLS' CLUBS

Club organization in all sections of the county is now completed with the result that there are sixty-two organized clubs, working on five agricultural projects as follows: Poultry 12, Garen 14, Pig 13, Canning 22, Calf 1. If we add to this number the eight Home Economics Clubs that were active the past three months of the year, we have a total of seventy organized clubs to date this year. There are approximately 1,270 boys and girls working in the clubs, all of whom are making excellent records. It will be interesting to know that club work is being carried on in 16 towns and 8 cities of the county.

During the last two weeks the County Club Leader has been holding 30 minute gatherings in all club working sections. These gatherings were held in school buildings during, school hours and were made up of all club members of all club projects in that school. The members were given a short talk dealing with club work followed by a discussion on club record keeping. Scouts were selected from the members to be used in directing the County Club Leader in that section when he makes individual visits.

The July local picnic day was discussed and arrangements made for the day's outing.

ning demonstrations, and literature, in the past two years, there is still literature on hand for distribution and an opportunity for demonstrations for any community or individual desiring it.

DAIRY FARMERS IN SOUTHERN ESSEX COUNTY ORGANIZING

(Continued from page 1)

ried out is to strengthen the local organizations in Danvers, Topsfield, Byfield, Rowley and all sections from which milk is shipped into the Salem, Beverly, Lynn, Peabody and Danvers markets. A market committee will be appointed representing all of the different sections which will determine reasonable prices and market conditions for milk delivered in these markets. Lawrence and Haverhill are already organized and have much better conditions than other cities in the county. It is hoped that the farmers in Southern Essex County will be successful and build up a strong organization. It is the best way in which they can protect their business interests.

FARM LOAN ASSOCIATION

The Puritan Farm Loan Association of Essex County which was organized at Haverhill, recently, has completed its appraisal of ten farms in the county and approved loans of about \$40,000. This Association is a branch of the Federal Land Bank, loaning money to farmers at the rate of 5 ½ per cent for interest and 1 per cent. additional which pays off the principal in 35 years. The loan can be paid off sooner if the borrower desires. The Directors of the Association are Messrs. L. G. Dodge, West Newbury; J. C. Poor, North Andover; H. A. Harrington, Peabody and J. L. Stewart, Amesbury. The Secretary is Ernest L. Folger, Morris Plan Company, Lynn, Mass., and the Assistant Secretary R. H. Gaskill, Hathorne. Persons interested in securing loans should get in touch with Mr. Folger.

FARMERS' WEEK AT AMHERST

The week of July 28th to August 2nd inclusive will be devoted to a summer Farmer's week which will give farmers the opportunity of lectures, demonstrations and inspections of agricultural projects at the College not feasible during the winter months.

In addition to the excursion from the county Farm Bureau organizations, the Poultry Association, the Dairymen's Association, the Holstein Breeders' Association, the State Grange and the Market Gardeners' Association have so far signified their intention of having Field Days here during that week.

Each of the above organizations will have its own program, and in addition, the College will have lectures and demonstrations of experimental and instructional work, and each department will display and explain its activities.

HOME ECONOMICS

The Home Economics record books and stories have been all judged, and the County prize winners are as follows:

Sewing Section

- 1st — Marion Dove, W. Newbury, 88.7%.
2nd—Bernice Mason, W. Newbury 87.65%.

Esther Neilson and Marion Dove will receive, as a prize, a week's trip to Massachusetts Agricultural Col-

FARMERS PROTEST ATTEMPT TO REDUCE IMPORTANCE OF THE STATE DEPARTMENT OF AGRICULTURE

—*

At an enthusiastic meeting representing all of the agricultural interests of the State held at Worcester on June 4, the proposed bill to split the State Department of Agriculture into several parts was thoroughly flayed. The proposed bill would create a new department with a Commissioner of Conservation which would include the Forestry Department, Nursery inspection, Moth and Insect work, Fish and Game Commission and Ornithology. The Bureau of Animal Industry would probably go to the State Department of Health. A few insignificant matters as Fair exhibits and prizes, grading laws, etc., would be left with the Department of Agriculture. Can any fair minded farmer or business man see the logic of mutilating our State Department in such a manner? Why should we not have a strong Department of Agriculture, as do other States? Are we ashamed of agriculture and do we wish to change the name of our department to the vague term of Conservation. The decision in the matter will determine the agricultural policies of the State for years to come. Massachusetts agriculture needs a strong state department if it is to be encouraged properly, for the benefit of both producer and consumer. Write to your State representative at once and tell him where you stand on this important matter. Hearings are now being held at Boston and the farmers need to stand up for their rights. Essex County was represented at the Worcester meeting by J. N. Dummer, Rowley, Elbridge Noyes, Newbury, F. A. Smith, Hathorne and R. H. Gaskill, Hathorne.

Orioles.

As for myself I am turned contractor of hammock netting for the orioles, taking my pay in notes. I throw strings out of the window and they snap them up at once. They sit in the cherry trees hard by and warble, "Hurry up! hurry up!" I never found out before just what they said. But if you will listen you will find that this is what they first say. A vulgarism, I admit, but native.—Lowell.

lege, with all expenses paid. This trip will come next month.

Helen Knight and Bernice Mason will receive a valuable book.

Bread Section

- 1st — Esther Neilson, Gloucester, 93.7%.
2nd—Helen Knight, Newbury, 93.4%.

HOME MAKING DEPARTMENT PERSONALS

Class of 1916

Miriam Illingsworth has completed her course at the Normal Art School, Boston, and will teach Arts and Crafts this summer at a girls' camp in Orleans, Mass. She is engaged to Frederick Robinson.

Marion Mathews graduates this month from the Normal School at Plymouth, N. H.

Elinor Stetson has been keeping house for her aunt and grandfather. She did community work in food conservation during the war.

Margaret Wood has been doing excellent work on the home farm, taking the place of her brother who was killed in France. She is to be married soon.

Elizabeth Palmer has been busy with Food Conservation and Red Cross work during the war. She will be married soon to E. R. Little and expects to live in Walpole, Mass.

Ruth Burbeck was employed in the Essex Aggie lunchroom for two years after graduation. She is now working at Daniel Low's in Salem.

Lucinda Bousley graduated in June from the Salem Hospital with the highest record in her class on the State Board Examinations. Last year she received the Florence Nightingale prize for the high standard of her hospital work.

SEASONAL NOTES

Protect your winter clothes from moths by cleansing and brushing thoroughly and putting them away in boxes tightly sealed by pasting paper over all cracks. Eggs or larvae on garments may be killed by spraying with benzine. (Avoid fire.)

Miss Balderson in her book on Laundering gives the following blanket wash which leaves the blankets clean and soft:

- 1 large bar Ivory Soap.
- 3 quarts cold water.
- 2 tablespoons Borax.
- ½ cup wood alcohol.

Shave soap into water. Heat to a low temperature until dissolved. When cold, add borax and alcohol. Add enough of this solution to your wash water to make a good suds.

Where the Wrinkles Are.

"Improving the boudoir cap—little wrinkles that help to make it more becoming," says a headline. The wrinkles, as we understand the proposition, are in the cap, not on the wearer.—Kansas City Star.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 1

HATHORNE, MASS., AUGUST, 1919

No. 4

BOYS AND GIRLS CLUBS.

Annual Field Day for Boys and Girls of the County to be Held at Hathorne, August 9, 1919.

The greatest agricultural event of the year for the boys and girls of Essex County will be the Junior Agricultural Field Day that will be held at the Essex County Agricultural School, Hathorne, August 9, 1919.

The members of the Boys and Girls Clubs in the various towns, of which there are about 1500, will be the special guests but *everyone is invited*. The County Field Day last year was one long to be remembered but if this year's program goes as smoothly as expected those that attend will have an even more enjoyable time. There are 62 organized clubs in the county and all the members show much enthusiasm over the coming Field Day. The different clubs over the county are holding meetings to pick the teams which will represent them in the various judging and athletic contests.

The morning program, which will begin at 10 a. m., will consist of short talks by County and State Agricultural Leaders, contests in pig judging, poultry culling, identification of vegetable seeds and demonstrations in bread making, canning, preparing vegetables for Fair and poultry culling. Two of the demonstrations will be given by club teams. Included in the morning program will be held a 30 minute session at which Mr. Farley, State Junior Extension Leader, will give a talk on the Importance of Club Work for the Community, and Director Smith of the Essex County Agricultural School will talk on the Value of the County Agricultural School.

Some things for the boys and girls to remember is they are coming to the County Field Day:

1. Be sure and make early arrangements of just how you are to get to Hathorne and back.
2. Try and come with other club members in special car or auto-truck. See your local club leader.
3. Bring a lunch and a drinking cup—tonic will be sold on the grounds by Scouts.
4. Register and get your button as soon as you get to the Field Day grounds.
5. Come with a smile and be ready to join right in and have the time of your life.



STUDYING FARMS IN ESSEX COUNTY
Farm Bureau Tour, 1918

POMONA FIELD DAY AT ESSEX COUNTY AGRICULTURAL SCHOOL.

A very successful Field Day was held by the Chebacco Pomona Grange on the grounds of the Essex County Agricultural at Hathorne on Wednesday, July 30th. The members of the Essex Pomona Grange were the guests of the Chebacco Pomona on that day.

The program opened at 9:30 with many interesting and well attended demonstrations. Visits were made to the numerous variety tests of sweet corn, field corn, grasses and peas, and short talks on these were given by Mr. Wilson and County Agent Gaskill, after which questions were answered. A most interesting poultry demonstration was held at the contest houses, in which Mr. Carver showed those interested how to cull the non-producer. The propagating grounds of the fruit department were visited and the raspberries, blackberries and strawberries were inspected. The work of the Homemaking Department was shown by exhibits of canning, millinery, sewing and house planning, and a short talk on the work of the school was given by Miss Jenkins. An exhibit of home-made labor saving conveniences, including fireless cooker, iceless refrigerator and kitchen cabinet, arranged by Miss Stratton, was of great interest to the women in attendance.

The speakers for the afternoon were S. J. Lowell, Master of the N. Y. State Grange and L. R. Smith, State Master

of Massachusetts. Miss Anna B. Baker of Boston entertained the children, and sports, including a ball game, were enjoyed by all. Music was furnished by the excellent band of the Essex County Training School of Lawrence.

A FARMER'S INSTITUTE ON WHEELS.

Farm Bureau Tour to be Held
August 6, 1919.

The annual tour of the Farm Bureau Directors and friends will take place on Wednesday, August 6, 1919. The trip last year was so much enjoyed that a large number have asked for another one for this year and a very interesting day has been arranged.

The party will assemble at the Agricultural School, Hathorne, at 10 a. m. A trip will be made over the school grounds, taking in the variety tests of about 50 kinds of field and sweet corn, the demonstrations on control of cabbage maggot, test of varieties of peas, soy beans and grass plots, rust proof asparagus, small fruit variety tests and the egg laying contest.

At 10:45 the party will leave for Andover where they will visit an exceptionally fine lot of farms, herds, orchards and Farm Bureau demonstrations.

At the farm of W. B. Corliss will be seen a fine Holstein herd and demonstrations on the value of top dressing grass and value of acid phosphate as

(Continued on page 4)

ESSEX FARMER and HOMEMAKER

HATHORNE, MASS.

Published by the Trustees of the Essex County Agricultural School.

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SUBSCRIPTION FREE

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BOARD OF PUBLICATION

Fred A. Smith, Director.
Ralph H. Gaskill, County Agricultural Agent.
Gladys E. Stratton, Home Demonstration Agent.
Elizabeth C. Jenkins, Home-making Department.
F. C. Roberts, Agricultural Department.

CALENDAR OF COMING EVENTS.

Aug. 6. Essex County Farm Bureau Tour.

The tour is for the purpose of visiting interesting and practical farms and demonstrations in the country. Party assemblies at the Agricultural School, Hathorne, at 10 A. M. Everyone is invited.

Aug. 9. Junior Agricultural Field Day.

All boys and girls in Essex County invited to attend. Activities begin at 10 A. M.

Sept. 2. Homemaking Department of the Essex County Agricultural School opens for the canning of fall vegetables for the winter lunchroom.

Sept. 3. Opening of the Agricultural Department of the Essex County Agricultural School for new students. Sept. 12-20.

Eastern States Exposition—Springfield. State teams representing all club projects from ten New England and North Atlantic States will demonstrate various phases of club work.

PEACH CROP PROMISES WELL.

From all indications there will be a bumper peach crop in Essex County this year. Many orchards which have not borne for from three to six years are carrying a crop this year. Peach growers are getting in their supply of baskets and making plans for picking the crop. Housewives over the county are getting ready to can a large quantity for winter use as everyone is peach hungry, owing to the short crop last year. Take advantage of this large crop and use all the peaches possible. By getting in touch with the Farm Bureau office, recipes may be obtained for canned or preserved peaches and for peach butters.

AGRICULTURAL SCHOOL NOTES.

Frank Croughwell, '16, of West Peabody, in company with his brother, has recently purchased a very desirable poultry, fruit and dairy farm, located at the corner of Lowell St. and the Turnpike, West Peabody. He plans to develop a high class trade in poultry and dairy products.

William Abbott, '16, who has been doing cow testing work in New Hampshire, was a recent visitor at the School.

J. H. Lovett, '18, is still employed in the Granite State doing cow test work. He hopes to enter college this fall.

Ronald Perley, '18, of Rowley has gone to Durham to take up Cow Testing Association work. He will work under direction of Mr. Brown of the United States Dept. of Agriculture.

Joseph Haggerty, '17, Danvers, is also engaged in cow test work. This makes four Essex Aggie graduates on this work.

Saul Freedman, '17, has been admitted to the Veterinary College of the Ohio State University. He goes to Columbus in September to take up class work. Mr. Freedman has been very successful in advanced registry work with the Mass. Agricultural College Experiment Station.

Instructor Davenport is traveling through the specialized fruit section of New York State making a detailed study of methods of management and marketing of products.

Instructor Hannaford is engaged in making a survey of the large poultry farms of the county.

COVER CROPS.

The present is the right time to get the best results from cover crops, especially in orchards. Young orchards can receive a great benefit from cover crop properly handled. First choice for varieties should be members of the pea family or legumes, such as crimson clover, red clover, winter vetch and Canada field peas are among the best. Buckwheat is valuable but kills early. Rye, oats and barley are also valuable. Only the rye, however, will live over winter. It is often desirable to sow flat or cowhorn turnip or dwarf Essex rape in the mixture. Turnips may be, under some conditions, profitably harvested for feed.

Cover crops serve a variety of uses as they check late growth in the orchard thus preventing winter kill. They fix plant food against waste. Their incorporation with the soil furnishes valuable available manure and humus the following spring; they prevent washing or blowing of soil; they also prevent deep freezing.

If the reader wishes further suggestions as to dates, varieties, quantities or other details, please correspond with us.

ESSEX CROWS AND CACKLES.

1. Egg Laying Contest Notes.

The Fifth Essex County Egg Laying Contest will open November 1, 1919. If you are interested in entering pullets in this contest write at once to us for reservation and complete details.

The average egg production of contest for 36th and 37th week was the same, 53.6%. There is a very close race on between Pen 13, Barred Rocks, owned by W. W. Lord, Danvers, with their total egg production of 1388 eggs and Pen 2, White Leghorns, owned by J. F. Dubois of Lynn, with a total egg production of 1367 eggs. At the rate Pen 2 is laying they should be tied with Pen 13 for first place in two weeks.

Five leading pens to date:

Pen 13 Barred Rocks, W. W. Lord, Danvers, 1389
Pen 2 White Leghorns, J. F. Dubois, Lynn, 1367
Pen 7 White Wyandottes, J. F. Crowley, Lynn, 1362
Pen 12 Barred Rock, J. Lord, Danvers, 1271
Pen 18 R. I. Reds, Wallace Moreland, Salem, 1255

2. Cull the Non Producer and Save Feed.

Produce more eggs from the same number of hens or as many eggs from less hens with profit. We must improve the quality of our stock by eliminating the unprofitable individuals and by using only the very best fowls for breeding. The only way to secure a high egg yield is to cull the non-producers and keep only the good hens.

HOMEMAKING DEPARTMENT.

Dorris Perry is a member of the Farm Unit at the Castle Hill Farm, Ipswich.

Marion Stockbridge is working during the vacation at Almy, Bigelow & Washburn's in Salem.

Blanch Burnham, Essex, is showing much enterprise in her contracts for berry picking through the season.

Mildred Annan is attending the Summer School at Teachers' College, Columbia University, taking courses in millinery and costume design.

Mary Stephenson and Janet Stanley are at the North Shore Baby Hospital taking the preparatory course.

Miss Margaret Nichols, an instructor in the Homemaking Dept., is attending the Summer School at the Hyannis Normal School.

PRIZES TO APPLE GROWERS.

The Massachusetts Department of Agriculture offers prizes to orchardists on 1919 as follows:

Thinning Contest, prize of \$50, \$25, \$15, and \$10 for comparative results on trees thinned and not thinned.

Marketing Contest, prizes of \$50, \$40, \$30, \$20 and \$10 for a report on the best system of marketing apples.

Essex County should be represented. Application for entry in these contests must be in by August 10, 1919. Write the Agricultural School, Hathorne, or Dept. of Agriculture, State House, Boston.

WITH THE FARM BUREAU

THE HEALTHFULNESS OF FRUITS AND VEGETABLES

The healthfulness of fruits and vegetables has been so demonstrated that many of them are believed to have true medicinal properties. The following table will give a few ideas as to the value of fruits and vegetables commonly used in the diet:—Fruits and Veg.—Health Properties

LEMONS—Cooling to the blood, antiseptic and cleansing.

ORANGES—Act on bowels and are rich in caloric power.

GRAPEFRUIT—Acts as a tonic similar to quinine.

GRAPES—Toning to the system and cleansing.

APPLES—Contain iron, correct chronic constipation and are an ideal nerve food.

PINEAPPLE—Because of natural ferment is considered especially good for the digestion.

PEACHES—Rich in iron, recommended for anaemic people.

FIGS—High nutritive value. Seeds encourage peristaltic action. One of nature's best laxatives.

CRANBERRIES—Good for malaria and also for erysipelas.

BLACKBERRIES—Made into cordial a most effective remedy for allaying inflammation of the bowels and curing diarrhoea.

OLIVES—Ripe, a real repair food, the oil is much more readily assimilated than in the extracted form prescribed for anaemic people. A mild laxative.

MELONS—Cooling to the blood and cleansing to the system.

TOMATOES—Contain vegetable calcium, good for biliousness and all forms of liver trouble. Should be eaten raw.

POTATOES—Potassium salts good for nerve and muscle. Rheumatic patients should eat the jackets of baked potatoes, which contain potassium salts and serve to counteract uric acid condition.

BETTS—Recommended as a nerve tonic.

CAULIFLOWER—Highest percentage of phosphorus of any vegetable is especially good for growing children.

RHUBARB—A good laxative, also stimulant to the appetite.

LETTUCE—A sure remedy for nervousness and insomnia.

ASPARAGUS—Good for the kidneys.

CELERY—Very good for nervousness and insomnia.

CUCUMBERS—Rich in phosphorus and potassium salts.

WATER CRESS—Contains a large amount of sulphur; it tends to purify the blood.

DANDELION GREENS—High percentage of iron, a spring tonic.

SPINACH—High in iron. Has bene-

ficial effect upon both bowels and kidneys.

ONION—Acts as a stimulant upon digestive juices, serves as a laxative in a general way to cleanse and purify the whole system.

CARROTS—Best for cleaning a muddy complexion, particularly when eaten raw.

SALAD DRESSINGS.

French Dressing.

$\frac{1}{2}$ t. salt	4 T. oil	Mazola
$\frac{1}{4}$ t. pepper		Wessen
2 T. vinegar		

olive

Mix ingredients and stir or shake until well blended. Some prefer the addition of a few drops of onion juice.

Note:—Tried out bacon fat may be used instead of oil.

Mayonnaise Dressing.

1 egg yolk	2 T. vinegar or 1 T.
$\frac{1}{2}$ t. mustard	each lemon juice
$\frac{1}{2}$ t. salt	and vinegar
$\frac{1}{2}$ t. paprika	$\frac{3}{4}$ c. oil
1 t. sugar	

Beat egg yolk, add dry ingredients and blend well. Add $\frac{1}{2}$ t. vinegar and beat thoroughly. Add oil gradually, at first drop by drop, and stir constantly. As the mixture thickens, thin with vinegar. Add oil and vinegar or lemon juice alternately, until all is used, stirring or beating constantly. If oil is added too rapidly, dressing will have a curdled appearance. A smooth consistency may be restored by taking the yolk of another egg and adding the curdled mixture slowly to it. It is desirable to keep the mixture cool during preparation.

Note:—If desirable, $\frac{1}{2}$ cup of whipped cream or the well-beaten white of egg may be folded in just before using the mayonnaise.

Boiled Dressing.

$\frac{1}{2}$ T. mustard	flour
$\frac{1}{2}$ T. salt	Yolks of 2 eggs
$\frac{1}{2}$ T. sugar	$\frac{1}{2}$ T. melted butter
Few grains cayenne	$\frac{3}{4}$ c. milk
$\frac{1}{2}$ T. Cornstarch or $\frac{1}{4}$ c. vinegar	

Mix dry ingredients, add yolks of eggs slightly beaten, butter, milk and vinegar slowly. Cook over boiling water until mixture thickens; strain and cool.

White Salad Dressing (Sweet).

1 c. granulated sugar	$\frac{1}{2}$ c. cream
White of 1 egg	(whipped)
$\frac{1}{4}$ T. lemon juice	

Make a syrup with lemon juice and sugar, cooking until it thickens and begins to change color slightly. Add to well-beaten white of egg. After this is cooled thoroughly add the whipped cream and beat well. Serve with fruit of any kind. Nuts always add to fruit salads.

Cottage Cheese Salad Dressing.

$\frac{1}{2}$ c. milk	whipped
$\frac{1}{2}$ c. vinegar	1 t. salt
(not too strong)	1 t. mustard
1 egg	$\frac{1}{2}$ t. paprika
1 c. soft cottage	2 t. flour
cheese	$\frac{1}{2}$ t. melted butter
1 c. sour cream.	

Mix the dry ingredients together and cream them with butter. Add the creamed mixture to the heated milk and stir until very thick. After

SOIL METHOD OF INOCULATING SOY BEANS A SUCCESS.

Essex County is well started on the road to soil improvement via the Soy Bean. Through the careful effort of some of our farmers, excellent inoculation by the soil method has been obtained and the little nodules on the roots of the beans are working night and day, taking plant food in the form of nitrogen from the air. Last year several farmers inoculated their Soys with commercial culture but so far as we know there was not a nodule in Essex County. This year the soil and glue method was used with marked success. Soil from well inoculated plots at the Massachusetts Agricultural Experiment Station was secured. The beans were moistened with a solution of furniture glue and the soil was mixed with the seed. In this way each bean was coated with the soil containing the bacteria and the seed were planted in the usual manner. In all the plots where this method was used the bean plants now show a large number of nodules on the roots as large as pea beans. As time goes on this will mean a great deal for the improvement of Essex County soils. The practice of planting soy beans in corn for silage is increasing in favor among our dairymen. If you are interested in soy beans or their inoculation, they may be seen at the Essex County Agricultural School farm at Hathorne or on any of the following farms over the County, where the farmers are co-operating with the Farm Bureau in demonstrating the value of this crop:

Chester Abbott, Andover.
R. N. C. Barnes, Andover.
Walter Boyce, No. Andover.
David Caldwell, Byfield.
Oscar Edmunds, Saugus.
Geo. Kinney, Amesbury.
Oscar Poland, Merrimac.
Walter Penney, Saugus.
Mosley Farm, Newburyport.
J. K. and S. B. Sargent, Merrimac.
Fred Stultz, W. Newbury.
Thomas Downs, W. Boxford.
Charles Whitehouse, W. Peabody.
Willowcroft Farm, So. Byfield.

the mixture has boiled, add vinegar slowly, stirring all the while. Cool slightly and add beaten egg. Put the cottage cheese through a sieve if necessary to break up lumps. Using an egg-beater, beat the cottage cheese gradually into the dressing until smooth. Lastly, fold whipped cream into dressing. Especially good with tomatoes, lettuce and other green vegetables.

Visitors are always welcome at the school to see our many demonstrations.

THINGS OF INTEREST TO BE SEEN AT AGRICULTURAL SCHOOL.

Among the many things of interest at the Essex County Agricultural School this month there are several which stand out as of first importance.

The poultry men will be especially interested in the new Cornell colony brooder house which is being constructed and which embodies several new ideas in brooder ventilation. This house will be in use about the first of August and will house a portion of the 500 young pullets now in the school flock. These young birds are a particularly fine strain, some of the Rhode Island Reds in the flock coming from pedigreed stock.

The birds in the egg laying contest are doing well with an average production of over 50% during the hot weather of the last three weeks. This figure is better than that of the International Egg Laying Contest held at Connecticut Agricultural College, Storrs, Conn. Worthy of note, also, are the new Essex model trap nests, differing from anything now on the market, and which have tested so satisfactorily that they are being installed exclusively at the School.

The various experiments on peas, cabbage and sweet and field corn are well worth watching from now until the end of the season. The hot weather test for peas is not yet finished, but the test on 25 varieties to determine earliness of maturity is completed; one variety, "Early Morn" unbushed maturing in 52 days.

The experiment on the use of tarred paper disks on early cabbage is very conclusive. The table below gives a very general idea of the results:

	Loss of plants	Percent of m'k'ble July 21
Without disks	20%	12%
With disks	3%	50%

It is also shown that the application of nitrate of soda at the rate of approximately 250 lbs. per A. increases the yield of cabbage at the first cutting by 50%.

In the sweet corn test for earliness, the plot is divided into two sections, one of which is planted in hills, the other in drills. Out of the 21 varieties in the test Gates "Seek-no-further," Essex Co. School's "Crosby" and Clark's "Pocahontas" are in the lead.

Growers of field corn will be interested in the early maturity experiment on 33 varieties of both flint and dent corn, for which the seed was obtained from various parts of the country. At present Longfellow Rhode Island White Cap and Ordway of the flints and Northwestern of the dents are the farthest matured. In connection with the corn test it is interesting to note the soy bean experiment in which it is clearly shown that the benefits of soil inoculation are tremendous.

CENTENNIAL AT WEST NEWBURY.

On Aug. 23, 24, 25 the town of West Newbury celebrates both the centennial as a separate town and the home-coming of its sons from the service. The pageant which is to be given on the afternoon of August 23 should command the attention of all who take an interest in the history of northern Essex County, for it is replete with the portrayal of historic events, and with humorous incidents arising from the superstitions of the early times. The manner in which the Merrimac River has ever dominated the lives of the people of the Merrimac Valley is gracefully depicted by solo and group dances with the central figure of the Spirit of the River appearing again and again. West Newbury has successfully mingled the two forms of pageantry, presenting allegorical or symbolic figures together with historically accurate scenes on a piece of ground noted historically as being the home of Whittier's mother and picturesque for its location on the banks of the river. Not only because of its festive nature should it form a logical prelude for the celebration for the returned sailors and soldiers, but because, like all pageants, it inculcates a spirit of democracy, including all people, even making special use of whatever few foreign born there are in the village.

SEED ALFALFA AS NEAR AUGUST FIRST AS POSSIBLE.

From past experience in this county alfalfa should be seeded alone on a well prepared seed bed before the tenth of August. By seeding at this time a good growth is obtained which protects the roots during the winter. Northern grown seed, 20 to 25 lbs. per acre has given best results. Ground limestone at the rate of two to three tons per acre is essential. Great care should be taken in getting inoculation, for without it the crop will be a failure. It is advisable to use both the soil and culture method. The County Agent, Hathorne, would be pleased to visit prospective alfalfa growers and assist in securing inoculating material, seed, etc., or farmers would do well to see the following men who have had good success with alfalfa:

J. L. Stewart, Amesbury.
J. B. Sawyer, Haverhill.
Dr. Elmer Babson, Gloucester.
Mosley Farm, Newburyport.
W. C. Dunn, Essex.

Salmon Salad.

Flake cold boiled salmon. Mix with French dressing, mayonnaise or cream dressing, arrange on nests of lettuce leaves. Garnish with the yolk of a hard boiled egg forced through a potato ricer and the white of the egg cut in strips.

FARM LOAN ASSOCIATION DIRECTORS MEET

The Federal appraiser for the Farm Land Bank of Springfield, Mr. Horace W. Tinkham, the noted R. I. farmer, has completed his work in Essex County and the Directors of the Puritan Association of Essex County recently held a meeting at the farm of Chauncey Gleason in Haverhill. Mr. Tinkham was pleased with the type of farmers who have asked for loans and stated that he wished his chances for getting to Heaven were as good as some of the men's chances of getting loans.

BAUER PRIZES.

The competition for the Gold Prizes offered by Trustee R. S. Bauer is now on. The following have been selected by the instructors:

Dana Killam, Boxford.
Maynard Tucker, Methuen.
Gilbert Tucker, Gloucester.
Calvin Poor, W. Newbury.
Arthur Greenwood, Methuen.
C. G. Caverly, Ipswich.
G. E. Garland, Andover.
H. Holden, Peabody.
H. Hansen, Beverly.

The following committee has been appointed by the Trustees to do the judging:

Geo. C. Thurlow, representing the Board of Trustees; J. M. Dummer, representing the Advisory Council; Stuart Little of the State Department of Agriculture.

It has been a splendid year for agriculture and the students have made a specially good showing this year. Undoubtedly the contest will be close.

A Farmer's Institute on Wheels

(Continued from Page 1)

a fertilizer for tomatoes. On the farm of Geo. Averill will be seen a fine apple orchard, a splendid Ayrshire bull and other things of interest. A demonstration on the selection of a pure bred sire will be given by Prof. Cooley of the Mass. Agricultural College. Mr. R. N. Barnes, who has an excellent fruit, poultry and general farm, will be visited. His demonstration plot of soy beans in silage corn, and peach orchard will be especially interesting, as well as the poultry plant. Mr. John Carver will give a demonstration of poultry culling and Mr. Earl Jones of Amherst will say a few words on home grown feeds. Other places will be seen as time permits.

An effort is being made to make the program as practical as possible. Anyone interested in agriculture is cordially invited to be present and if you do not get some ideas that will be worth more than a day's pay, we believe it will be your own fault.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 1

HATHORNE, MASS., SEPTEMBER 2, 1919.

NO. 5

STATISTICS CONCERNING HOME-MAKING

Figures Show That Our Girls Need Preparation for Homemaking

Increase in Prices since 1913—Bulletin of Department of Labor:

Food 107 per cent., clothing 115 per cent., fuel 79 per cent., household furnishings 131 per cent.

Increase in number of broken homes:

1910—1 out of every 13 marriages broken by divorce.

1915—1 out of every 9 marriages broken by divorce.

Many girls who marry without a serious study of the business of home-making find a business in their hands that they cannot manage.

"How I wish I had had this chance when I was a girl!" is the exclamation we hear over and over again from the women who come to our Home-making Department for a casual visit, for the frequent exhibits of work or for the short courses in sewing, millinery and cooking held during January and February.

Are there not more girls in Essex County who should be taking advantage of the

THREE YEAR COURSE FOR GRAMMAR SCHOOL GRADUATES

or of the

ONE YEAR COURSE FOR HIGH SCHOOL GRADUATES

In either course they would learn how to cook economically and how to choose foods wisely; how to make new garments and hats or how to make over those grown shabby by hard wear; how to take care of the sick in their own homes and how to plan and attractively furnish a simple home.

The fall term opens September 3rd. Those wishing to enter these courses who have not already enrolled should enroll during the first week of the term.

OUR GRADUATES IN AGRICULTURE

Many young men who are interested in agricultural education frequently ask the question: "What can I get out of it." This question is best answered by the examination of the work of the graduates and students of the Essex County Agricultural School. The list given below is not an entire one nor is it made up of the exceptional cases. The first twenty-four are graduates, the next two graduate this year, and the last four

(Continued on page 3)



A 1919 JUNIOR FIELD DAY GROUP.

NEW TEACHERS FOR AGRICULTURAL DEPT.

Mr. Farrar

Mr. Harry A. Farrar of Vergennes, Vermont, has been appointed educational manager and department head. He is a native of Chester, Vermont; a graduate of the Chester High School and of Middlebury College. Mr. Farrar has successfully taught in the elementary schools, high school, state normal school and summer school. He has been for the past three years, Superintendent of Schools over several towns centering on Vergennes. Mr. Farrar has received advanced degrees from Middlebury College.

Mr. Stiles

Mr. Robert M. Stiles joins the School staff as farm superintendent and instructor in livestock and dairying. Mr. Stiles was born in Brooks, Maine; graduated from high school of his home town and then attended the agricultural department of the University of Maine. Mr. Stiles has been a successful farmer and dairyman and for the past three years has been County Agricultural Agent and Club Leader for Somerset County, Maine.

Mr. Hathaway

Mr. W. A. Hathaway will teach Science and Physical Education. He is a graduate of Taunton High School and attended the Massachusetts Agricultural College, leaving to enlist in the naval branch of the service. Since his discharge he has been a teacher of Science and athletic director at the Saugus High School.

FIELD DAY.

The Essex County Boys' and Girls' Field Day that was held Saturday, August 9th, at the Essex County Agricultural School was well attended by over 500 boys and girls from all sections of the county. The day's program was so well arranged and the weather conditions so favorable that the youngsters had even a better time than last year.

One of the most interesting happenings of the day was the general mass meeting at which State and County agricultural leaders spoke.

The agricultural contests and athletic events had many entries and strong competition, and excellent work was done by all competing club members. Prizes were awarded to following:—

Pig Judging

- 1st—Wallace Leighton, Haverhill
- 2nd—Philip Couhig, Beverly
- 3rd—Hazen Davis, Haverhill
- 4th—Gordon MacNevin, Haverhill

Poultry Culling Contest

Austin Lewis, Stanley Crowe and Edward Bickum, all of Haverhill, and Henry Tadgell of Salem, each receiving a 1st Prize Ribbon.

Potato Race—Boys

- 1st—Philip Couhig, Beverly
- 2nd—Sydney Hill, Methuen
- 3rd—William Hayes, Newburyport

Potato Race—Girls

- 1st—Elvira Benson, W. Boxford
- 2nd—Catherine Hanlon, Beverly
- 3rd—Katie Koydres, No. Andover

100 Yard Dash—Boys

- 1st—Wallace Leighton, Haverhill
- 2nd—Philip Couhig, Beverly
- 3rd—Sydney Hill, Methuen

(Continued on page 3)

ESSEX FARMER and HOMEMAKER

HATHORNE, MASS.

Published by the Trustees of the Essex County Agricultural School.

A MONTHLY PUBLICATION

SUBSCRIPTION FREE

Persons desiring this publication should address The Agricultural School, Hathorne, Mass.

Entered as second class matter, May 28, 1919 at the postoffice at Hathorne, Mass., under the Act of Aug. 24, 1912.

BOARD OF PUBLICATION

Fred A. Smith, Director.

Ralph H. Gaskill, County Agricultural Agent.

Gladys E. Stratton, Home Demonstration Agent.

Elizabeth C. Jenkins, Home-making Department.

F. C. Roberts, Agricultural Department.

CALENDAR

Sept. 2. Homemaking Department of the Essex County Agricultural School opens.

Sept. 3. Agricultural Department of the Essex County Agricultural School opens.

Oct. 1. Upper Class Agr'l Students return.

Fairs in Essex County

Essex County is to be favored with a large number of fairs this fall. We are herewith printing the dates of several:

Aug. 16. United Shoe Machinery Fair.

Aug. 26. Salem Fair.

Sept. 9, 10, 11, 12. Essex County Fair at Peabody.

Sept. 16, 17, 18, 19. Greater Lynn Fair.

Sept. 26, 27. Essex Agricultural Society, (101st year) at Topsfield.

Other Fairs

Sept. 1, 2, 3, 4. New England, Fair, Worcester.

Sept. 15-20. Eastern States Exposition, Springfield.

Sept. 30-Oct. 3. Brockton Fair.

CORN BORER.

The European cornborer situation has reached a stage in which all, consumer and farmer alike, may well be concerned. Every town and city in the county is now infested and quarantined, the only county at present in which this condition prevails. More citizens should take an opportunity to visit the Government Station in Arlington where this insect is being studied in every phase and condition of development. Already large banners are being suspended across the inter-state highways between Massachusetts and New Hampshire warning travellers of the danger of carrying corn and other infested material into new areas.

Is it not full time that farmers in

the great corn belt where this crop is paramount, be warned and made fully alive to the menace? Farmers, like armies, can well afford to fight their battles on the other man's territory.

VISITORS

On Tuesday, August 19th, Professor Works of the Department of Agricultural Education at Cornell, together with a large party of agricultural teachers under the Smith-Hughes act from various staffs of the north and east, paid a visit to the School. They inspected the plant and the farm and declared themselves well pleased with the School.

A welcome member of the party was Mr. Warren K. Blodgett, former instructor at this School and at present and extension instructor at Cornell University. Mr. Blodgett will shortly leave the University to become head of the Agricultural Department at Hampton Institute, Hampton, Virginia. The best wishes of his friends at the school go with him to his new position.

Graduates Chesley and Turner of the class of 1918 visited the School recently.

RESIGNATION

It is with great regret that we announce the resignation of Mr. Franklin C. Roberts, who has been a member of the staff since the organization of the School in 1913. Mr. Roberts will be a member of the staff of the Keene (N. H.) Normal School and will, therefore, be an assistant to his former Superintendent and Principal, Mr. Mason. He will teach Science, Economics and school gardening.

Mr. Roberts will be missed from our staff. All teachers and former students wish him the greatest success in his new position.

FARMERS' MARKET AT

LYNN AND HAVERHILL

WELL PATRONIZED

The Farmers' Public Markets at Lynn and Haverhill have been running for several weeks and a good number of farmers have taken advantage of marketing their fruit, vegetables, eggs and poultry in these open air markets. The patronage in both cities has been very good and farmers have found little trouble in disposing of their products at a price considerable higher than at wholesale. On the other hand the consumer has been well satisfied as the prices are less than the retail prices and the quality of produce is high. The markets are open on Tuesday, Thursday and Saturday, and will continue for several weeks. It is expected that many people will take advantage of these markets to lay in their supply of winter vegetables. At Lynn, Mr. M. B. Magrane and Mr. Charles P. Murray have been very active workers for the market. While at Haverhill, Mr. Clinton Goodwin has directed the work in cooperation with a committee of producers and consumers.

POTATO DEMONSTRATION PLOTS OF INTEREST

About twenty farmers in the county are co-operating with the Farm Bureau and Prof. Earl Jones of the Massachusetts College, in determining the value of the Rural or Russett type of potato as compared to the Green Mountain type, and also in comparing the yield of Green Mountains which have been down from Maine one, two and three years. On each farm the different varieties are planted side by side under similar conditions, and later in the season the yield of each will be determined by weighing the crop from a part of the field. In some sections the Rural type of potato are blight resistant, and if they prove to be this way in Essex County there is no doubt but what many farmers will plant them in preference to the Green Mountain. Among the varieties being tested are Gold Coin, Dibble's Russett, Rural Russett from Cross Bros. at Fayetteville, N. Y., Green Mountains direct

(Continued on page 4)

FIELD DAY.

(Continued from page 1)

Both the Gloucester Home Economics Bread Demonstration team and the Haverhill Canning Demonstration team gave excellent illustrations, and those girls who attended left the meeting with much clearer ideas about the proper way to make bread or can fruit and vegetables.

The demonstration given by the Salem Boy Scout Troop was received with much interest and helped to finish off the day.

The Flag Relay Race made up of the northern and southern sections of the county, was won by the northern section, with boys from Haverhill, Methuen, Buxford and Amesbury, making up the winning team.

Club yells and the County Club song that followed the noon lunch showed that Essex County youngsters have good strong voices and an ear for music.

JUNIOR CLUB PLANS

The Essex County Club Leader has been asked by the 'State Federation of County Club Leaders' to see to the training of a Poultry Judging Team for the Eastern States Exposition that will be held at Springfield, September 15-20. Poultry club members are now being trained by Mr. Carver the poultry instructor at the Essex Agricultural School, in order that a team of three may be picked from the group that is attending the poultry classes. The picked team will be prepared to give a Poultry Culling Demonstration at the New England Fair that will be held in Worcester; will enter the Poultry Judging Contest at Worcester, and will represent the State of Massachusetts in Poultry Judging at the Eastern States Exposition.

FIFTIETH WEEK

REPORT OF FOURTH EGG LAYING CONTEST.

ESSEX COUNTY AGRICULTURAL SCHOOL & ESSEX COUNTY POULTRY ASS'N CO-OPERATING
Hathorne, Mass., Thursday, October 16, 1919

The following table indicates the number of eggs laid in this contest for the week ending Thursday evening as above. Also (in the first column) the total number of eggs produced by the pen to date.

Each pen contains ten birds numbered consecutively.

When the pen record shows a greater number of eggs than the totals of the individuals making up that pen, the explanation is that some eggs were laid outside the trapnests and therefore could not be credited to the individual. In each case however, the pen gets the credit for the full number of eggs laid.

Y	W	Pen	Individual Records									
			1	2	3	4	5	6	7	8	9	10
White Leghorns												
1538	15	1 J. F. Crowley, Lynn	4	0	0	4	0	3	0	0	0	4
x 1962	26	2 J. Frank Dubois, Lynn	1	5	5	0	2	0	4	3	5	0
1573	4	3 J. F. Crowley, Lynn	0	0	0	0	0	2	1	0	0	1
1093	2	4 Upland Farm, Ipswich	0	0	0	0	0	2	0	0	0	0
White Wyandottes												
1582	20	5 T. H. West, Haverhill	0	5	4	4	1	2	0	3	0	1
1355	9	6 T. H. West, Haverhill	0	2	0	0	3	4	0	0	0	0
1777	34	7 J. F. Crowley, Lynn	2	4	5	0	4	5	4	5	5	0
1503	15	8 R. M. Anderson, Freeport, Me.	4	0	0	B	0	0	3	2	5	1
Columbian Wyandottes												
1411	28	9 B. F. Waggett, Beverly	0	4	0	4	0	2	3	5	5	4
Barred Rocks												
1497	31	10 R. L. Smith Kennebunkport, Me.	1	2	0	5	7	6	3	0	1	4
1070	10	11 Elinor Lord, Danvers	3	4	0	0	0	0	1	0	0	2
1674	14	12 J. Lord, Danvers	4	0	0	4	0	0	0	0	6	0
1922	7	13 W. W. Lord, Danvers	0	0	M	0	M	M	M	4	3	0
White Rocks												
1443	28	14 Overlook Farm, Haverhill	5	0	3	1	5	5	3	0	0	6
1355	19	15 Overlook Farm, Haverhill	3	0	4	7	0	0	2	3	0	0
1421	33	16 J. R. Lord, Topsfield	2	1	3	5	4	5	3	5	5	0
Rhode Island Reds												
1434	19	17 A. H. Jackson, North Andover	4	0	0	0	5	0	0	5	5	0
1626	17	18 Wallace Moreland, Salem	0	1	3	4	0	1	0	0	6	0
1501	11	19 J. Lord, Danvers	0	2	0	4	0	0	0	5	0	0
1216	5	20 Philip Lord, Danvers	0	0	0	0	3	0	0	0	2	0
1306	16	21 A. A. Pembroke, Beverly 2nd year	0	0	0	4	0	0	0	6	1	5
1123	12	22 A. A. Pembroke, Beverly	3	0	5	0	0	4	0	0	0	0
1373	z 43	23 W. Lord, Danvers	2	5	6	5	5	0	6	6	4	0
1266	4	24 W. H. Ricker, Gloucester 2nd year	0	0	0	0	0	4	0	0	0	0
1475	22	25 Upham Farm, Byfield	5	0	2	0	4	0	0	4	7	B
36496 444												

Y Pen total to date. W Pen total for week. X Leading pen to date.
Z Highest yielding pen for week. B Broody. M Moulting. D Dead.

25.8 per cent Egg production.

LEADING PENS TO DATE

Pen 2, J. F. Dubois, Lynn, White Leghorns,	1962 eggs
Pen 13, W. W. Lord, Danvers, Barred Rocks,	1922 eggs
Pen 7, J. F. Crowley, Lynn, White Wyandottes,	1777 eggs

FARM BUREAU TRIP ENJOYED BY MORE THAN 200 FARMERS

The Annual Farm Bureau Tour, which was held on Wednesday, August 6, was attended by more than 200 people in about 50 automobiles. It was a fine group of business farmers who were out to get some new ideas about their business; and from the opinions that were expressed, the day was well spent. In farming, as in other lines of business, new and improved methods are continually being discovered, and the prosperous farmer finds it necessary to keep in touch with his neighbor and with what others are doing, if he is to succeed.

The party gathered at the Essex Agricultural School at Hathorne and spent about an hour on the school farm studying the many variety tests of small fruits, sweet corn, field corn, peas, the rust proof asparagus, test on control of the cabbage maggot, egg laying contest, and other things of interest.

From here the party journeyed to Andover, one of the most progressive farming towns in the county. The farms of George Averill, W. B. Corliss, R. N. C. Barnes, and John Rasmussen, were visited. At each farm the type of farming was studied, and the methods which are being used successfully and profitably were discussed. At the Averill farm a demonstration on the selection of a herd bull was given by Prof. R. B. Cooley of the Massachusetts Agricultural College, and a great deal of interest created. Two splendid young bulls owned by Messrs. Averill, and Corliss were exhibited. At the Corliss farm a fine plot of tomatoes was seen that had had only manure and acid phosphate for fertilizer, and a demonstration of top dressing of grass was inspected. Professor Earl Jones of the Massachusetts Agricultural College, talked on the potato variety test that was seen at the Corliss farm, and on the Barnes farm he discussed the value of home grown leguminous roughage where a fine plot of soy beans in silage corn was growing.

At the Barnes farm a demonstration on poultry culling was given by Instructor John Carver of the Essex Agricultural School and was much enjoyed. The Rasmussen farm, altho containing only 17 acres, is an intensive market garden farm and Mr. Rasmussen is certainly turning out a lot of fine vegetables.

Not the least enjoyable was the trip to the Hood farm where some of the best Jersey cattle and Berkshire hogs in the world were seen. Old Sophie 19th, the \$50,000 cow, with a day old calf by her side created much interest as well as the show herd which is going to Chicago to the National Dairy Show this fall. The big black Berkshires were interesting to all and the boars Baron's Successors, Baron, Longfellow's Double and Bar-

on's successor, are the best of the breed, the first weighing 769 pounds at present.

From the interest which was shown it would seem that this annual tour has come to be an event which farmers will look forward to with pleasure and profit each year.

PROFITABLE CORN GROWING

If you don't believe there is anything in plant breeding look at the record of Andrew Longfellow of Groveland where father and grandfather before him bred the now famous "Longfellow" corn. Last year Mr. Longfellow grew one of the handsomest fields of corn in Essex County; and just to find out if it was any good he exhibited it at the State Corn Show at Boston, Essex County Corn Show at Hathorne (Danvers) and at the Massachusetts Agricultural College Corn Show. He won first prize at all of these shows and in addition took the first prize at the Essex County Show in the 30 ear germination contest with a test of 100 per cent. This certainly shows what careful selection will do. Essex County has a lot of good corn growers and needs more. Judging from the cost of production figures in the recent State Contest of 42 cents per bushel for the winner, there are more farmers who should grow corn. George Averill of Andover, who was in the State Contest produced his corn for 54 cents per bushel.

OUR GRADUATES.

(Continued from page 1)

have attended the school for two or more years.

Wm. J. Abbott of Andover, J. Houston Lovett of Beverly, Joseph Haggerty of Danvers, and Ronald Perley of Rowley, are engaged in cow testing in New Hampshire. Mr. Abbott contemplates buying a fruit farm in Essex County.

G. Stewart Barnaby of Middleton is a nursery foreman for Olmstead Brothers, landscape gardeners.

Horton Bradstreet of Topsfield is in dairy work at the Emerson Farm, Haverhill.

Thomas C. Bryson of Salem is operating a greenhouse and private estate in that city.

Frank Croughwell of Peabody has bought a poultry and dairy farm. He is making a success of it.

Stanley DeQuoy of Georgetown is head poultryman at the Stevens' Farm in North Andover.

Arthur K. Fuller of Middleton is farm foreman for Mr. C. H. Preston, Hathorne.

Saul Freedman is doing advanced registry work for the Massachusetts Agricultural Experimental Station. He is planning to be a veterinarian.

Melville Grey of Beverly is an expert greenhouse man. Previous to enlistment he was a traveling salesman for Hitchings Brothers, the greenhouse contractors.

Ernest A. Howard of Haverhill is in charge of the Boys' and Girls' Club Work of Essex County. He has charge of 1400 club members.

Ralph Hussey of Danvers is running the home farm in partnership with his father.

Dwight and Paul Killam of East Boxford are also working on the home farm.

Hans Kundrup, formerly of Hathorne but now of Wakefield, is operating a successful farm of his own.

Luther Martin of Marblehead has twelve acres of his own in market garden crops.

Fred Perry of Beverly is operating a farm in Vermont with a partner.

Ralph S. Putnum of Danvers is intensively working on the home farm.

Leonard E. Russell of Danvers has entire charge of the home farm and he is doing superior work.

Edward P. Sweeney of Gloucester is a successful landscape gardener. He raises excellent swine. He frequently has several hundred pigs.

Philip V. Tarr of Gloucester is supervisor of the school gardens in that city. He has over one thousand home gardens.

Gordon Woodbury of Beverly is the landscape draftsman in the R. J. Farquahar office. His training in drafting and ornamental gardening received at the school fitted him for this position.

Byron Raymond, formerly of Beverly, is operating his own farm in Franklin with great success.

Edwin Bergsbohm of Lynn is in the landscape department of the Breck- Robinson Co.

Gilbert Tucker of Beverly is supervisor of school gardens in the city of Methuen.

William Knowles of Magnolia has been superintendent of a private estate in Ipswich for three years.

Archie L. Pierce of Wenham has been a successful farmer for three years. He now has charge of the poultry on a large private estate.

James Tiplady of Peabody is a most valuable man at the greenhouses of the Harmony Grove Cemetery, Salem.

Ralph Bake of Methuen is now in his second year as a tenant farmer in that community. Market gardening is his chief activity.

To any red-blooded boy agriculture is truly worth while. He will find himself better equipped for agricultural work if he has a scientific as well as practical knowledge. Such a combination can be obtained at the Essex County Agr. School. Tuition at this school is free to any resident of Essex County between the ages of fourteen and twenty-five.

Marshmallow Dressing.

Cut $\frac{1}{4}$ pound marshmallows in small cubes, place the chopped marshmallows in $\frac{3}{4}$ cup of cream (whipped). Let stand one hour in a cool place. Serve with fruit salads.

WITH THE FARM BUREAU

DIRECTIONS FOR CULLING.

1. Cull all hens with physical defects that would keep them from seeing or obtaining an abundance of food.

2. Loss of Color of Fat Due to Laying. In any of our American breeds, such as the Leghorn, R. I. Red, Wyandotte, Rock, and etc., that have yellow skins and shanks, we have a factor that is of great assistance to us in our culling work. When a hen is not laying, fat is deposited in thin layers just underneath her skin. In the yellow skinned varieties this fat is colored with a yellow pigment or coloring matter, which is easily distinguished through the skin of the hen.

When the hen starts to lay she ceases storing up this fatty deposit under her skin and places the fats in the yolks of the eggs she is laying from day to day, together with the yellow pigment which gives the yolk its yellow color. After a hen has been laying for a considerable period she draws heavily on her reserve supplies of fat in order to manufacture the yolks for the eggs. As this fat leaves the body taking with it the yellow pigment, the color leaves the skin and different sections of the hen, until the skin obtains a bleached or white appearance.

These changes occur in the following order:

Vent. The color leaves the vent very quickly in about 10 days. A laying hen should have a white or pink vent; a yellow vent indicates the hen is not laying.

Eye Ring. Next in order the color leaves the edge of the eye lid until it is entirely bleached out.

Beak. The yellow color then gradually fades from the lower beak starting at the base and working towards the tip until the color finally fades from the tip of upper beak. A white beak indicates heavy production for at least a couple of months.

Shanks. Because of slower circulation in the shanks of the bird the color leaves them slower. The yellow first fades from the front of the shank and then from the back of the shank until at the end of four or five months' heavy laying the yellow has all disappeared and the shanks are white in color.

When a laying hen stops laying for any reason she begins once again to store up fat and the yellow color comes back in just the same order as it left her body, namely, vent, eye-ring, beak and shanks. The color comes back more rapidly than it leaves, however, and after seven to ten days of loafing the vent begins to yellow and in a couple of weeks yellow starts to tint the base of the lower beak and eye rings.

3. Molt. Early molters are as a rule poor layers. The hens that molt

late in the summer or early fall are the ones that have laid longest and are the heavy producers. Cull the early molters and save the late molters.

4. Body Changes Due to Laying.

Vent. A laying hen has a large moist vent. A loafer has a yellow, dry, puckered vent.

Abdomen. The abdomen in a laying hen should be soft and pliable, dilated and the keel bone should be depressed at least four, five or six fingers from the pelvic bones, giving the hen good capacity. A hen that is not laying has but two to three fingers capacity.

Pelvic Bones. Straight, thin, well spread pelvic bones are indicative of a good layer. Curved, thick, pelvic bones with thick deposits of fat and close together are indicative of non-production.

Combs. A large soft pliable comb, bright red in color, is an indication of laying condition. A dry, coarse, stiff, shrunken, scaly comb is a sign of non-production. When a hen is laying the comb is red and cold. When a hen is coming into laying her comb is red and hot. When a hen is not laying her comb is dry, rough and cold.

If you wish to learn more about culling your hens arrange for a demonstration on your farm by writing to Poultry Department, Essex County Agricultural School, Hathorne, Mass.

SALAD RECIPES.

Banana Salad.

Remove skin, cut the bananas in half length-wise, place half on lettuce leaves, sprinkle with chopped peanuts. Serve with boiled or mayonnaise dressing.

Pineapple and Marshmallow Salad.

Cut fresh or canned pineapple in small cubes. To two cups of pineapple use the entire quantity of marshmallow dressing as given in the recipe. Combine at the last minute and serve with a maraschino cherry on top.

Note:—Oranges may be used instead of pineapple.

Raisin Salad.

1 c. chopped raisins 1 c. chopped celery
1 c. chopped peanuts
(other nuts may be used)

Mix above ingredients with mayonnaise dressing and let stand for one-half hour before serving. Serve on lettuce leaves.

Poinsettia Salad.

Remove skin from medium-sized tomatoes. Divide tomato into five sections, leaving them connected slightly at bottom. The section will fall apart at top, giving the appearance of a poinsettia flower. Serve with mayonnaise dressing.

Note:—A mixture of equal parts celery and nuts moistened with mayon-

naise is very nice placed in the center of the flower. Garnish with mayonnaise dressing.

Stuffed Tomato Salad.

Remove skin from medium-sized tomatoes. Remove thin slice from top of each and take out seeds and some pulp. Fill tomatoes with fresh pineapple cut in small cubes or shredded, and nut meats, using two-thirds pineapple and one-third nut meats. Mix with mayonnaise or boiled dressing. Garnish with dressing, halves of nut meats and slices cut from tops of tomatoes. Serve on lettuce leaves or on a bed of shredded lettuce.

Carrot Salad.

1 c. carrots (raw) (chopped)
1 c. peas 1 c. celery
½ c. peanuts

Dice carrots, cut celery in small pieces; add to peas; sprinkle with salt; marinate with French dressing; pile on lettuce and serve with mayonnaise or boiled dressing.

Bean Salad.

2 c. cold cooked beans
1 c. cabbage (chopped)
1 sweet red pepper (chopped)

Mix ingredients, season with salt and marinate with mayonnaise or boiled dressing. Serve on lettuce.

Olive and Celery Salad.

¼ c. ripe olives walnuts or peanuts
½ c. celery (nuts)
Lettuce Mayonnaise
½ c. nuts (pecans)

Cut olives and celery in small pieces and marinate with mayonnaise or boiled dressing. Heap on lettuce leaves, add more dressing and garnish with whole olives.

POTATO DEMONSTRATION.

(Continued from page 2)

from Maine, Green Mountains that have been grown here one year, and local seed that has been grown here several years.

The habits of growth of the different varieties are very interesting and if you are interested we would suggest that you get in touch with one of the following men who are co-operating in the test.

L. G. Dodge, West Newbury; John McDonald, West Newbury; George Kinney, Amesbury; Herbert Rudd, Amesbury; Walter Penney, Saugus; Ellery Metcalf, Saugus; Industrial Farm, Hathorne; George Averill, Andover; W. B. Corliss, Andover; R. N. C. Barnes, Andover; J. O. Low, Essex; J. L. O'Brien, Essex; W. F. Austin, Amesbury; George Carter, Andover; Herbert Lewis, Andover; James Abbott, Andover; Fred Gould, Andover; Porter Livingston, Andover; James DeLong, Salisbury; Edson Walker, Merrimac

The Farm Bureau will be glad to get in touch with anyone else who is testing potato varieties, as there is much chance for improvement along this line.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 1

HAWTHORNE, MASS., OCTOBER, 1919.

No. 6

CANNING WITHOUT SUGAR.

On account of the present shortage of sugar the amount of canning done by the housewife is being seriously affected, and consequently the sale of fruits on the farm. This lack of sugar is affecting the canning of peaches particularly. Peaches are plentiful this year for the first time in several years. Would it not be well to can them regardless of sugar?

Many do not realize that fruits and fruit juices may be put up just as safely without the use of any sugar. Peaches, pears, plums and apples as well as all other fruits may be prepared and packed in the jars as usual, adding hot water instead of syrup to the jars. Sterilize the time required for each particular fruit. You will find that by following the government rules for cold pack canning that you will have no difficulty in keeping the fruit.

When you wish to use these fruits pour the liquid into a sauce pan, add the sugar, which will be more plentiful by that time, and bring to the boiling point. Pour over the fruit and cool before using.

For fruit juices: extract the juice from the fruit, concentrate by boiling, to one-half the amount and can as you do for fruits. When sugar is obtainable make your jellies. You will find by having a variety of juices on hand, you can have many more flavors. You will enjoy those made from the mixture of the juices.

Your fruit pulps may be concentrated nearly to the consistency of butters or marmalades and also canned as you can your fruits. When sugar is available return the pulp to a kettle, add sugar and finish concentrating to the butter or marmalade consistency, which will take from ten to fifteen minutes.

CLASS OF 1923.

The following officers were chosen by the Class of 1923:

President, Eric Bergstrom of Lynn. Vice-President, Joseph Dodge of Topsfield.

Secretary-Treasurer, Miss Marion Severance of Lynn.

The entering class has shown good judgment in the selection of officers, which indicates that this class intends to make a strong showing in the various student activities.

NEW TEACHERS AT THE ESSEX COUNTY AGRICULTURAL SCHOOL.

Miss Marion Crawford of North Brookfield, Mass., has been appointed head of the Cooking Department. Miss Crawford is a graduate of Framingham Normal School, has taken courses at Hyannis State Normal School, Simmons College, Boston University and Miss Farmer's School of Cookery. She has been connected with the Somerville Vocational School since its opening eight years ago, for four years having charge of the Somerville High School Teachers' Lunch Room. During the war, for four months, Miss Crawford was head of a Conservation Center connected with the Norwood Civic Association.

Mr. George E. Gifford has joined the staff of the Essex County Agricultural School. Mr. Gifford's native city is Salem. He is a graduate of Salem High School and of Boston University.

Mr. Gifford leaves a position as Principal of the Ashland, Mass., High School to join our staff. He will conduct classes in English subjects and mathematics.

Miss Elizabeth G. Johnson of Newburyport has been appointed assistant in the Cooking Department. She is a graduate of Middlebury College, with the B. S. degree. Miss Johnson taught sewing and cooking last year in the Middlebury High School, Vermont. For the past four summers she has been engaged in Playground work in Newburyport, the first two years being assistant and the last two years supervisor.

GREATER LYNN FAIR.

The Essex Agricultural School was undoubtedly the largest single exhibitor at the Greater Lynn Fair. The exhibits of the various departments of the school occupied one entire side of the large agricultural tent, and were arranged in an instructive and attractive manner. The Millinery and Home Making displays created much interest.

One very strong feature of the exhibits was the use of instructive charts showing the possibilities of better breeding. The exhibit occasioned many favorable comments and much credit is due the staff for their efforts.

JUNIOR CLUBS AT EASTERN STATES.

At the Eastern States Exposition that was held at Springfield September 15-20, Essex County was well represented by boys' and girls' club exhibits. Thirty-one exhibits were on display at "Camp Vail" (boys' and girls' section), as follows: 12 Garden, 17 Poultry, and 2 Pigs. Because of the ten Northeastern states being represented competition was very strong. This, however, did not trouble our club members, as shown by the following awards: Maurice Claridge, Haverhill, won 1st prize on Light Brahma Cockerels, and 2nd prize on Light Brahma Pullets; John Narkum, Danvers, won 4th prize on Rhode Island Red Pullets; Austin Lewis, Haverhill, won 2nd prize on one dozen best brown eggs; Alfred Chase, Danvers, won 3d prize on best brood Sow. Honor diplomas were awarded Lionel Collis, Newburyport, for having one of his turkeys on display, and John Narkum (Danvers) for having two of his Guinea Pullets on show. Other members who exhibited were as follows: Harold Rogers, Mary Boover and Wallace Leighton, all of Haverhill; Elizabeth and Benjamin Questin, of Amesbury; Arnold Collis, Newburyport; George Sumner Metcalf, Saugus; Howard Aldridge, Danvers; Hugh Parkhurst and Franklin Bray, both of Gloucester. Several of the above won prizes in the vegetable contest, but these awards have not been received as yet,—the notice received stating that Essex County won four prizes in the garden contest.

TENNIS OUTFIT FOR THE HOME-MAKING DEPT.

The Essex County Associated Boards of Trade, at the time of their annual meeting at the school in the spring voted to give the Home-making Department a complete tennis outfit. It will be remembered that a similar outfit from the same source was destroyed when the old mansion house on the school grounds was burned.

The gift has been received and duly presented and we expect the young women of the department will realize a vast amount of pleasure from the use of this outfit.

ESSEX FARMER and HOMEMAKER

HATHORNE, MASS.

Published by the Trustees of the Essex County Agricultural School.

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BOARD OF PUBLICATION

Fred A. Smith, Director.
Ralph H. Gaskill, County Agricultural Agent.
Gladys E. Stratton, Home Demonstration Agent.
Elizabeth C. Jenkins, Home-making Department.
Harry A. Farrar, Agricultural Department.
George E. Gifford, Agricultural Department.

CALENDAR OF COMING EVENTS.

- Oct. 1. Advanced Students' Agricultural re-enter.
- Oct. 8. Trustees' Meeting.
- Oct. 9. Essex County Associated Boards of Trade Meeting at School.
- Oct. 14. Agricultural Advisory Council Meeting at School.
- Oct. 15. Chebacco Pomona Grange at Beverly, 2:30 P. M.
- Nov. 6. Essex Pomona at West Newbury, 10:30 A. M.
- Dec. 4. Annual Meeting of Farm Bureau.

EDITORIAL.

The "County Fair" season for 1919 is ended and everyone appears to be well pleased that it is so. The School has attempted to please all associations and interests in the matter of exhibitions, displays and co-operative helpfulness. Before another season comes around it seems as though a great deal needs to be done in the way of a more carefully worked out plan. With the great fairs about us, of State, New England or regional scope, county fairs must be carefully planned, managed and carried out to warrant their being a success, either from a financial or exhibition standpoint.

Farmers are not in a position today to properly support four county fairs within 30 days. They have neither the time nor enthusiasm to carry forward such extended program.

On the other hand, local agriculture and horticulture is of such importance that it certainly needs demonstration to both farmers and city dwellers.

The County Fairs should naturally be the exhibition place and the clearing house for the best of products and display of new ideas.

Some notable features were intro-

duced this year. The arrangement of grounds at the Lynn Fair was admirable. The poultry show at the same fair was one of the best ever seen at a cattle show in the county. The old Essex County Agricultural Society fair at Topsfield introduced several new ideas, notably an attempt to call together several organizations to hold meetings during the time of the fair. They also held an auction sale of live stock, which was well patronized. In the extension of this idea would it not be possible to make the county fair a great bazar and on the closing days of the fair allow exhibitors to sell their exhibits, together with other farm products and products of domestic manufacture. There were repeated calls from interesting customers who desired to purchase canned products. This might well furnish one of the most useful means of exchange or sale of products prepared by our young club canners.

It is to be hoped that those in executive positions in the various associations may definitely plan a constructive campaign for a more unified and united action.

ALUMNI NOTES.

Carl Hallberg, Class of '17, has returned from the war. Mr. Hallberg leaves for Iowa on the first of October, where he will engage in extensive farming. His familiarity with and fondness for improved farm machinery will stand him in good stead.

O. Olsson, Class of '16, has been honorably discharged from the service. He had a varied and interesting experience overseas. While in a French port he met Victor Poirier, Class of 1916, who was engaged in translating American thought into French language. As a part of his employment, Olsson is still preparing news for the Lynn Daily Item, consequently Essex Aggie may expect the usual favorable consideration.

Raymond C. Poor, Class of '19, has gone to the middle West. He will now be engaged in agricultural operations on a large scale. He will farm in Ohio.

Victor Poirier, Class of '16, recently visited the school.

Leonard Ives, formerly a member of the school, has been honorably discharged from the service. He is re-entering the school with the present Senior class.

Earl Grant, Class of '17, was a recent visitor at the school. He will continue studies later in the year at one of the Forestry Schools.

Gilbert Tucker, Class of '19, has entered the Connecticut Agricultural College.

HOMEMAKING DEPARTMENT NOTES.

The Homemaking Department has opened with the largest registration in its history, almost double that of last year.

The new one year course for High School graduates has attracted a group of 14 girls, distributed through the County as follows:

Salem, 4; Beverly, 1; Middleton, 1; Marblehead, 3; Ipswich, 1; Lawrence, 1; Haverhill, 2; Peabody, 1.

The entering class numbers 24, six of whom have been admitted to advanced standing as they have completed two years of High School work.

As the North Shore Babies Hospital is to remain open until November 1st, Janet Stanley and Mary Stephenson are remaining there until that time and school credit is being extended to them for their work there.

Three interesting talks by pupils have been given in the morning assembly:

Waitress Work in the Wenham Tea Room, by Viola Haszard.

Waitress Work in Thompson's Cafe, Quincy, by Margaret Wallace.

The Training Offered by the Gordon Bible School, by Marion Stockbridge.

Dorothy Hodge, '19, is working in the cutting room of the Ideal Baby Shoe Co., at Danvers.

Work in the making over of dresses and hats was exhibited at the Lynn and Topsfield Fairs by Blanche Burnham, Viola Haszard, Grace Hartman and Laura Richards. Plain sewing by Pauline Moore, Rachael Foster, Eleanor Murphy and Gertrude Russell. Both school and Home Project Work in jellies, preserves and pickles were shown by a number of the girls.

Because of the wider scope of the present course in homemaking, Elizabeth Palmer, '16, is taking graduate work at the school this fall.

TOPSFIELD FAIR

Friday, September 26, all the members of the entering class attended the Topsfield Fair. A systematic tour of the various exhibits was made and instructive talks were delivered as follows:

Small Fruit, by Director Smith.

Vegetables, by Mr. Mitchell.

Cattle Breeds, by Mr. Stiles.

Poultry Breeds, by Mr. Hannaford.

The tour, which was in charge of Mr. Metcalf, was much enjoyed by all the students.

The Candid Cobbler.

Advertisement in English paper—"All plain work, such as soles and heels, returned in one or two days. Toe-capping and vamping will take longer, as we do them properly."—Boston Transcript.

WITH THE FARM BUREAU

WILL THERE BE AN ESSEX COUNTY CORN SHOW THIS YEAR?

The Advisory Council will probably answer this question at their coming meeting, but judging from the interest shown at last year's show, which was held in connection with the Annual Farmers' Day at the Agricultural School, the show should be repeated. The 30-year germination tests were especially interesting and it was reported by one who ought to know that there was no better show in the state last year.

Plan now to send some corn and make this year's show the biggest and best yet. Select your best ears and hang them in a dry place where the mice won't get them. There are some fine corn fields in Essex County this year, and we must have the assistance of every corn grower in the county, if the show is to accomplish the greatest results. Anyway, it pays to select the best seed for your own use next year. Time and time again in tests in this county home grown seed corn has proved to be best. The best time to select seed corn is in the field. If you have not selected it in the field the next best time is at husking time. Don't wait and dig it out of the crib next spring after it has molded and frozen all winter.

WHY A SCRUB BULL?

Why use a scrub bull of unknown ancestry when you can swop even for a pure bred bull of excellent breeding? This may sound like a fairy tale, but it is a true story. One of the broad minded men of Essex County who is interested in live stock improvement has offered to exchange a pure bred bull for your scrub bull without cost to you, if you are really interested in improving your herd. He is a breeder of Ayrshires, and has three splendid young Ayrshire bulls that he has offered for this purpose. We believe that this man has at heart the improvement of cattle in Essex County and he deserves a lot of praise. There should be a rush for this chance. Get in touch at once with County Agent Gaskill, 'phone—Danvers 50, and get started on the improvement of your herd. Remember that a good bull is half the herd and a poor bull is all of it, as far as improvement is concerned.

Present and Prospective.

June is the circus month—also the month of some one-ring affairs that lead to circuses later.—Boston Transcript.

POTATOES ROTTING BADLY.

Reports come in from all over the county that the continued wet weather has caused a heavy loss of potatoes by rotting. The loss ranges from 10 to 90 per cent. of the crop. Farmers who were lucky enough to plant early potatoes and have marketed them are in luck. Question: In Essex County with our nearby markets, soil and climate conditions, can we afford to raise late potatoes when early potatoes usually sell for a much larger price, escape the blight and yield as well or better? Think it over.

The fall millinery groups begin their six weeks' course the week of October 6th. The groups are in Andover, Cliftondale, East Saugus, Lynnhurst, Marblehead, No. Saugus, No. Andover and Saugus Centre. Miss Mildred Annan is the instructor. Anyone wishing information concerning the groups for spring work may write or telephone (Danvers 50) the Home Demonstration Agent, Hathorne, Mass.

At the Eastern States Exposition the Massachusetts Poultry Judging Team won First Prize in competition with several other states. Hugh Parkhurst, Gloucester, one of our live poultry club members who served as one of the three that formed the team, walked into the Farm Bureau office the Monday following the Exposition with a gold medal pinned on his coat.

Canning and Garden club exhibits were held at both the Peabody and Greater Lynn Fairs. This display was gathered from garden and canning club members of the county, and was well received at the fairs.

SALTING AND BRINING

At the height of the canning season it is often difficult to keep up with all the products from the garden that need attention at one time, a few crocks and barrels and some salt and water will take care of the surplus material until the time when the busy housewife has more leisure to attend to it.

The use of salt has many advantages. Brining can be done with a minimum amount of labor and at a small cost. Material can be utilized in larger quantities and kept in containers which cannot be used for canning. This method of preservation furnishes a variety in the diet and gives wholesome and appetizing products.

Equipment to Use

Wooden kegs, stone crocks, enamel buckets or glass jars may be used to

store the products. Containers made of yellow or pitch pine should not be used as they will flavor the products. Only porcelain-lined or granite-ware buckets should be used. Bottles should be used when cooking pickles, as acid will attack metal utensils. A granite or wooden spoon may be used for stirring.

Dry Salting

This is the simplest method of brining. The packing of vegetables or fruits in a large amount of salt or in a strong brine causes the formation of lactic acid and other forms of mold and thus injurious bacteria are prevented.

After the vegetable is washed, blanched and cold dipped, as for canning, pack in containers in two inch layers and cover each layer with salt, using $\frac{1}{4}$ lb. of salt to one pound of vegetables. Cover top with clean cloth and weight down cover.

Brine should form to cover top in two days. If it does not, make a brine to cover product, as it must be covered continuously with brine. After fermentation stops, cover containers with melted paraffine. This will prevent the growth of molds and check the evaporation of liquid. Store in a cool place. Vegetables preserved in this manner should be freshened by soaking three hours in cold water, and may be used in salads, pickles or cooked for the table.

Brining

TABLE OF BRINES

Percentage of solution	Weight of salt	Quantity of water
1	2 ozs.	6 qts.
2	4 "	6 "
3	6 "	6 "
4	8 "	6 "
5	10 "	6 "
10	1 lb. 6 ozs.	6 "
15	2½ lbs.	6 "
20	3 "	6 "
25	4 "	6 "

Soft water should be used in making the brine. A good measure of salt is absolutely necessary to prevent spoilage, but one must remember that salt drawn the water from the product and toughens it somewhat. For this reason the weaker brine will give a better texture to the finished product. The product must be weighed down to keep it under the brine. As soon as the bubbling or fermentation stops the acid in the brine is strong enough to kill most bacteria in the liquid, and from this time on the brine should be covered. It is necessary to exclude the air, because otherwise scum will grow which would cause the product to soften and spoil. Cover brine with cheese cloth and pour over a thick layer of paraffin. Cover par-

PHYSICAL EDUCATION AND ATHLETICS AT ESSEX AGGIE.

The school is taking a keen interest in out door work this year. A department looking to the physical training of the students has been established, with Instructors Hathaway, Hammond, Wilson and Carver responsible for the work. The regular field work is supplemented by class room instruction in hygiene and sanitation. Already the students are being drilled in marching formations, setting up exercises and foot ball. All are required to participate in some form of physical training.

Instructor Hathaway has been appointed Faculty Manager of Athletics. A good schedule of school foot ball games has been arranged.

The following is the schedule:

Salem High, Oct. 8, at Hathorne (practice).

Essex Aggie, Oct. 11, at Amesbury.

Essex Aggie, Oct. 18, at Beverly.

Essex Aggie, Oct. 25, at Ipswich.

Essex Aggie, Nov. 7, at Methuen.

Essex Aggie, Nov. 15, at Manchester.

Essex Aggie, Nov. 27, at Saugus.

Open dates: Nov. 1 and Nov. 22.

Since these games are largely arranged for Saturday afternoons it is to be hoped that Alumni and former students of the school may be able to attend to help cheer for Essex Aggie.

Corn Salad.

Drain 1 can corn or use corn left from dinner, cut from cob. Season with mustard and onion juice. Marinate with French dressing. Let stand one hour, then drain. Arrange on lettuce and garnish with boiled or mayonnaise dressing.

Pear Salad.

Use either canned or fresh ripe pears halved. Place halves on lettuce leaves and fill centers with chopped nuts and cover with spoon of salad dressing. Centers may be filled with cream or cottage cheese. Just good ripe pears with salad dressing are delicious.

Potato and Celery Salad.

2 c. boiled potatoes $\frac{1}{2}$ c. finely cut celery (diced) ery
1 apple cut in small cubes
Marinate with French dressing and garnish with celery tips. Serve with boiled or mayonnaise dressing.

SALADS.

A salad well prepared is an excellent food. Salads supply in the diet: Water Cellulose or bulk Mineral salts Flavor Acids

Salads made from meat, fish or eggs with a dressing contain nourishment. A green salad has a lower food value, but it is wholesome, refreshing and appetizing.

THE POOR(?) FARMER.

To read the daily papers about what is going on in the outside world concerning wages, hours of work, etc., makes the thinking farmer thoughtful. With strikes at every hand, clothing, shoes and all farm supplies soaring in price, the city goes up for cheaper food. Labor says that it must have an 8 or even a 6-hour day, while the farmer still works his 8-hour day (8 hours before dinner and 8 hours after dinner). He must work two days for one day's pay, buy his supplies at labor prices and sell his products at a reduced price. Does this seem logical to anyone with a balanced mind? How long can the farmer be expected to continue farming under any such scheme of things? He would do much better to go into the trades. A big readjustment is certainly necessary and it looks as though things had gone about the limit. The next few months should see changes for the better.

SALTING AND BRINING

(Continued.)

affin to protect from dust as this may be used over and over again.

Fermentation in Brine

For vegetables which do not contain much water as corn, green tomatoes, peas, cucumbers and string beans, a weak brine may be used for fermentation. Make the brine by adding three-fourths cups of salt and one-half pine of vinegar to one gallon of water. Wash and drain product, pack in containers and cover with brine. Put into a moderately warm place to ferment. After fermentation ceases, remove to a cool place and seal with paraffin.

A heavy salad should not be served with a hearty meal. It may be served as the main dish for supper or luncheon. Light salads, or those composed largely of greens, may be served with a heavy meal or with meals which have several courses.

Salads are economical because left over portions can be combined and utilized.

Important Points in Salad Making.

1. Green vegetables and fruit should be fresh, crisp and cool.
2. Materials should be combined just before serving.
3. Meats and fish should be marinated and combined at the last minute.

Note:—The word "marinate" when used in connection with salads means to allow the salad materials to stand in French dressing or other designated liquid for about an hour before serving.

ADVISORY COUNCIL MEETING.

The Advisory Council of the Farm Bureau will hold a meeting in October to formulate a program for Farm Bureau work the coming months. The plan which was started last year of holding meetings in each town in the county to discuss the agricultural problems was very successful and will probably be continued. Accurate figures on the yield of the demonstration plots on top dressing grass, soy beans in silage corn, potatoes, etc., are being obtained by the County Agent, and some interesting results are expected.—The Essex County Co-operative Farming Association has had a very successful year and no doubt the farmers in each locality will have suggestions for how it can better supply their needs.—The improvement of livestock and use of lime are topics which are always of interest at a real farmer get-together.—Watch this paper for the announcement of the Farm Bureau meeting in your town and don't fail to be on hand.

FIRST JOINT ASSEMBLY

On Wednesday, October 1, the first joint assembly was held in the main hall, all of the older students being back to take part. Mr. C. T. C. Whitcomb, Field Secretary of the First Federal Reserve District, spoke on the value of systematic saving.

Mr. Whitcomb had charge of assembling the Massachusetts Vocational Exhibit for the Panama Exposition. For the purpose of securing materials and photographs for this exhibit he visited our school at that time. In his talk he urged every American boy and girl to spend wisely and never more than one earned. He outlined a thrift program which will be adopted by the school and all are urged to co-operate in the plan and acquire the habit of thrift.

It is planned that these meetings will be much enjoyed by the staff and student body as an interesting program is in progress for the coming months.

At the assembly of October 8 Rev. E. J. Prescott of Hampton Falls, N. H., gave an interesting talk on Pansy Varieties and Pansy Growing.

PLAY AMESBURY

Under the direction of Mr. Hathaway, athletic coach, the football squad are preparing for their first game on Saturday, October 11, with Amesbury High at Amesbury. The students of the entire school should lend their support to the entire schedule, and it is hoped that many will be present at the first game.

SENIOR CLASS OFFICERS

The senior class has organized with the following officers:

President, Frank Hersey; Vice-President, Margaret Walsh; Secretary-Treasurer, Alexander MacDonald.

ESSEX FARMER AND HOME MAKER

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VOL. 1

HATHORNE, MASS., NOVEMBER, 1919.

No. 7.

COUNTY BOARD OF TRADE MEETING.

On Thursday, October 9th, the Essex County Boards of Trade met at the Essex County Agricultural School. This was the opening meeting of the season, and was well attended by a representative body of delegates from the various commercial and trade bodies within the county.

The students of the Homemaking Department furnished an excellent dinner, typical of the season and the farm. As a mark of appreciation, the delegates voted to present the department with an electric washing machine and named a committee to transact the business.

Various committees met in the forenoon, and at the general meeting in the afternoon reports were rendered.

Readers of the FARMER will be interested in the reports of several of the committees, particularly that of the sub-committee working under Agriculture. The committee on live stock and soil fertility made several varied, pertinent and timely recommendations to the board, one being that a campaign for the general use of local milk be encouraged. This must automatically stimulate the improvement of dairy herds and dairy methods and extend later to building up of the fertility of our soils. The latter is getting to be a most serious local agricultural problem.

The sub-committee on warehouses and cold storage met and reported in full as the result of extended studies which had been carried on during the previous eight months. The committee had satisfied itself beyond question of the need of proper cold storage facilities, and that these facilities should be placed at the disposal of the farmers of the county. The committee reports that no storage is available for local farm products in the region between Boston and Portland. They further proved that vast quantities of food have been lost for the want of proper refrigeration. They also believe that a common public storage would make a splendid link in the much desired cooperative movement which is so much needed. The committee proposes to make a

(Continued on Page 4.)



A Typical School Fair Exhibit of 1919.

IMPORTANT MILK MEETING.

At the milk conference at the State House, October 24 and 25, several points of great interest were brought out in regard to the value of milk in our daily diet.

Mr. M. D. Munn, President of the National Dairy Council, gave the experience of a shipbuilding yard, where the men had been in the habit of stopping work for a glass of beer in the mid-forenoon and mid-afternoon. This yard substituted milk for beer when prohibition went into effect, and found that after two months the efficiency of the plant had increased 16%.

In a Des Moines hospital, where the wounded soldiers were being cared for, one of the doctors was so convinced of the value of butter fat as a restorative that the hospital contracted with an ice cream factory to furnish ice cream with a known proportion of butter fat for forenoon and afternoon lunches for the men. The gain was noticeable within a week. The butter fat was then sharply reduced, and after another week a noticeable change for the worse was found in the condition of the men.

Dr. McCollum's latest experiments in nutrition have led him to the statement that we should change our habitual diet in three respects. First, decrease consumption of meat by one-half; second, use one quart of milk per person a day; third, add more

AGRICULTURAL ADVISORY COUNCIL MEETING.

On October 14, the Advisory Council for Agricultural matters, connected with the work of the Essex County Agricultural School, met and the organization was completed as follows: President, E. L. Haynes, Methuen; Vice President, Joseph N. Dummer, Rowley; Secretary, F. A. Smith, Director of Essex County Agricultural School.

The morning session was given over to the discussion of Agricultural School Department matters. Many plans were discussed in an informal way. After luncheon, Farm Bureau matters came up for consideration. The principal items under discussion were Projects for 1920 and Plans for the Annual Meeting.

County Agricultural Agent Gaskill and Poultry Specialist Carver offered and discussed a suggested schedule of projects and plans for the ensuing year. The Council decided that the emphasis for one year should be on the economic side of farming, attempt being made to assist farmers to reduce their cost of production by the following:

(Continued on Page 4.)

green leafy vegetables to the diet. He is also convinced that an addition of leafy vegetables to the egg and milk diet of tubercular patients would increase the percentage of cures in tuberculosis.

ESSEX FARMER and HOMEMAKER

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

A MONTHLY PUBLICATION
SUBSCRIPTION FREE

Persons desiring this publication should address
The Agricultural School, Hathorne, Mass.

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BOARD OF PUBLICATION

Fred A. Smith, Director.
Ralph H. Gaskill, County Agricultural
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Gladys E. Stratton, Home Demonstration
Agent.
Elizabeth C. Jenkins, Home-making
Department.
Harry A. Farrar, Agricultural De-
partment.
George E. Gifford, Agricultural De-
partment.

CALENDAR.

Nov. 5, 10 A.M.—Meeting of County
Leaders. Women of Middlesex, Wor-
cester and Essex at Perkins Hall,
Women's Educational and Industrial
Union, Boylston street, Boston, Mass.
Mrs. Edith C. Salisbury of U. S. De-
partment of Agricultural will speak.

Nov. 5, 7.30 P.M.—Community
meeting at West Peabody. Discus-
sion of plans of community work.

Nov. 7, 9 A.M.—Essex County
Teachers' Association, Tremont Tem-
ple, Boston.

Nov. 11, 2 P.M.—Andover Demonstration
Group meets with Miss Laura
Gifford, M. A. C. A meat cutting
demonstration will be given.

Nov. 13, 10.30 A.M.—Women's Ad-
visory Council of Essex County Agri-
cultural School and Farm Bureau.

Nov. 25, 2 P.M.—Graduation of
Class of 1919, Essex County Agricul-
tural School.

Dec. 3, 10.30 A.M.—Annual meeting
of Farm Bureau, Essex County Agri-
cultural School.

EDITORIAL.

Before this number of the FARMER
is placed in the hands of the readers
the country will have returned to the
normal time. Daylight saving as a
plan authorized by Congress after a
trial of two years, has now probably
passed into history. If it were possi-
ble to poll the men and women of the
country, unquestionably they would
decide against any further effort to
revive this plan.

People on whom rests the responsi-
bility of producing food for this coun-

try, and even for foreign countries
as well, early decided against the
innovation. They tolerated it as a
war-time measure. The plan has
been a serious handicap in the aggre-
gate of food production. To this
group, representing a large percent-
age of our population, should be added
the housewives and mothers, who
have also seriously felt the disadvan-
tage of the emergency law.

In the last analysis it is always
the consumer who pays the expense,
when any change of plan increases
the cost of food, consequently every-
one must feel this burden.

The wage earner with decreasing
hours of labor and increasing wages
per day has seemed to be less and less
concerned with gross production. It
is a debatable question as to whether
he is able to realize a very material
benefit were this plan to be prolonged.

All in all, we are quite contented to
let popular opinion decide this ques-
tion. We doubt if, after having been
thrice defeated by the greatest legis-
lative body in the land, it will ever
appear again.

This number of the ESSEX FAR-
MER and HOME MAKER will be
sent to a large number of new names.
This list of names has been supplied
largely at the request of the Essex
County Associated Boards of Trade,
and the lists have been prepared in a
most painstaking manner by the local
Board of Trade and Chamber of Com-
merce Secretaries.

A post card mailed to us, requesting
its continuance, will have our closest
attention.

BACK TO SUGAR SAVING

The best and in the long run the
easiest way to save sugar is to change
our plans for desserts. Why not give
the housewives a rest from making
cakes, pies and puddings and eat a
salad with crackers and cheese? Bet-
ter still would be the use of ripe fruits
which are still to be had in our mar-
kets—pears, grapes and apples, ban-
anas, too, if eaten when fully ripe,
which means when the skin be-
gins to show black spots. The fruit
sugars are the most digestible of all
things. A few dates or figs are far
better for the children than other
sweets. It is worth while to eat cere-
als again without sugar and with a lit-
tle extra salt and to see how we like
he natural flavor of the food.

Warm gingerbread with a glass of
cold, cold milk makes one of the nicest
desserts, or apple Brown Better, or
Chocolate Cornstarch Pudding.

F. HALLETT BROOKS.

The saddest event in the student
history of the Essex County Agricul-
tural School occurred Monday, October
20, resulting in the death of Hallett
Brooks. At about 12.45 P.M. sev-
eral students were returning to the
school grounds. An automobile ap-
proached, unnoticed by the student,
and while attempting to cross the
street, he was struck by the car.

He was taken promptly to the Dan-
vers State Hospital, and his parents
were summoned. He had, however,
been so badly injured, that help was
impossible, and death soon followed.

This student had proven himself a
boy of much promise. Straightfor-
ward and upright, he was held in
highest esteem by teachers and stu-
dents alike. His classmates had
chosen him to represent them in the
Student Council of the School, this
being the most responsible class po-
sition. His untimely death has cast
a shadow of gloom over the School.
Its members join in deepest sympathy
with the bereaved family.

STUDENT NOTES.

At the joint assembly of October
22, the Senior Class held a debate on
the following:

Resolved, that a Daylight Saving
Law should be retained. Messrs.
Hersey and Evans presented the af-
firmative in an able manner. The
decision was awarded to the speakers
for the negative, Messrs. Whalen and
Cassano.

The Class of 1922 has organized
with the following officers: President,
Gardner Caverly of Ipswich; Vice
President, Alfred Bryer of Danvers;
Secretary and Treasurer, George
Woodman of Lynn.

The tennis court is now in fine con-
dition. Members of the faculty, as
well as several students have enjoyed
the use of the new tennis outfit re-
cently presented to the Homemaking
Department. Good use can be made
of the court this fall during the noon
hour.

The School thrift plan is becoming
very popular with the students. Sec-
retary Wood reports a large number
of subscriptions for thrift stamps
during the first week. A record of
sales by classes will be kept.

HOMEMAKING DEPARTMENT

The Thursday morning assemblies
have been put in charge of the girls.
On October 16 the Senior girls pre-
sented a sketch "Thrift Stamps for
Pay," and sold thrift stamps after-
ward to the students.

WITH THE FARM BUREAU

ACTIVITIES AMONG THE BOYS' AND GIRLS' CLUBS.

The largest Boys' and Girls' Club exhibit held in the county for the year 1919 was the display at the County Agricultural fair, Topsfield. The large exhibits of canned goods and pigs owned by club members was of great credit to the boys and girls of the county who have worked so faithfully in their projects the past year. Pig club prizes were awarded as follows: Class 1—Best Fat Hog—First, George Haynes, Haverhill, \$7; second, David Warburton, Haverhill, \$5; third, Marjorie Elwell, Essex, \$2; fourth, Bernard Sargent, Haverhill, \$1.

Class 2—Greatest Gain with Cheapest Cost—First, Leo Dooley, Lysn, \$7; second, Gladys White, Essex, \$5; third, Orin Foster, No. Andover, \$2.

Class 3—Best Young Sow to be Kept for Breeding—First, Bernard Sargent, Haverhill, \$7; second, Henry Caproni, Peabody, \$5; third, Marie Stokes, Lynnfield, \$2; fourth, Robert Doane, Beverly, \$1.

The Canning Club exhibit that was on display in the main tent was the largest canning club exhibit ever held in Essex county. There were 680 jars on display exhibited by 68 girls from practically every section of the county. The judging was done by Miss Helen M. Norris, Assistant State Club Leader, in charge of girls' club work.

Special prizes were given by the Salem Naumkeag Bank to the amount of \$55. The prizes were awarded as follows: First, Ruth Chadwick, W. Boxford, \$5; second, Elvira Benson, W. Boxford, \$3; second, Mary Coombs, Manchester, \$3; second, Florence Nichols, Danvers, \$3; second, Marion Morse, Manchester, \$3; second, Florence Ray, Beverly, \$3; third, Madeline Walker, Beverly, \$2; third, Mabel Gould, Georgetown, \$2; third, Harriet Stanley, Manchester, \$2; third, Geddy Lugli, Haverhill, \$2; third, Dorothy Root, Ward Hill, \$2; fourth, Hubert Blackburn, Haverhill, \$1; fourth, Catherine Kirby, Danvers, \$1; fourth, Lena Lugli, Haverhill, \$1; fourth, Hazel Provost, Haverhill, \$1; fourth, Ellen Edgar, Beverly, \$7; fourth, Alice Mullin, Beverly, \$1; fourth, Nelson Hastings, Middleton, \$1; fourth, Lillian Richardson, Middleton, \$1; fourth, Alfred Deveau, Beverly, \$1; fourth, Louise Dube, Beverly, \$1; fourth, Mary Twohig, Beverly, \$1; fourth, Emily Shattuck, Beverly, \$1; fourth, Richard Jeffrey, Beverly, \$1; fourth, Jesse Chase, Haverhill, \$1.

fourth, Harry Johnson, Beverly, \$1; fourth, Helen Ouellett, Haverhill, \$1; fourth, Paul Brindle, Haverhill, \$1; fourth, Catherine Hanlon, Beverly, \$1; fourth, B. M. Jameson, Saugus, \$1; fourth, Elizabeth Noonan, Haverhill, \$1; fourth, Mildred Landin, Beverly, \$1 fourth, Gertrude Stoops, Manchester, \$1; fourth, Ruth Clagston, Amesbury, \$1; fourth, Helen Knight, Newbury, \$1; fourth, Margaret Tebo, Essex, \$1.

The success of this display was due to the good work of the local canning leaders.

During the latter part of October, Mr. Earle H. Nodine, our new State Poultry Specialist, and the County Club Leader, have been carrying on a campaign in poultry club work to get boys and girls in various sections of the county interested and to enroll in the 1920 yearly Poultry Contest, which begins November 1. Poultry clubs will be formed in the following sections: Methuen, Haverhill, Newburyport, Amesbury, Ipswich, Haverhill, Lynn, Danvers and Gloucester.

ANNUAL MEETING OF THE FARM BUREAU ON DECEMBER 3, 1919.

Plans for the annual meeting of the Essex County Farm Bureau, which will be held at the Essex County Agricultural School on Wednesday, December 3, 1919, at 10.30 o'clock, are well under way. All men and women who are interested in argiculture, home economics, club work, and Farm Bureau work in general, are urged to be present. The Agricultural Agents of the county will report on their work, and the project leaders of the different towns will formulate county plans for the coming year. It is expected that several specialists from the State College at Amherst will be present. Miss Gladys E. Stratton (Home Demonstration Agent) with Miss Laura Comstock of the State College, have arranged an interesting program for the women, and an effort is being made to secure President Kenyon L. Butterfield of the Massachusetts Agricultural College, as the main speaker.

An innovation will be an exhibit and demonstration of the difference between the scrub bull and the bull of known ancestry and merit.

In the men's section it is expected that several farmers in the country will report on their success with Soy beans, alfalfa, potato tests, corn variety tests, etc.

Save the date for a day of pleasure and profit.

ANDOVER HOUSEHOLD ACCOUNT GROUP

Many women in Essex County appear to be interested in the keeping of household accounts. Already 119 books have been purchased by women in the county.

When Miss Laura Gifford, Assistant State Leader, was in the county in the spring, she visited Manchester, Byfield, Merrimac, Andover, Danvers, and met a group at the Agricultural School, to talk about the keeping of accounts.

At the Andover meeting arrangements were made for Miss Gifford to carry on what is called a demonstration project in household accounts, with the following program:

October—Where does the dollar go?
November—Meat cutting demonstration showing cheapest and best cuts of meat.

December—Demonstration—Use, preparation and cooking of cheaper cuts of meat—making and use of fireless cooker.

January—Use of left over meats—meat substitutes.

February—Food for school children.

March—Grocery order for family of five—Discussion of changes which may be made with either same food value or increased food value at the same cost.

April—Planning of meals from the grocery order.

(a)—Balanced meals.

(b)—Variety and attractiveness.

(c)—Time of preparation.

(d)—Value of planning ahead.

May—Problems of buying—When?

Where? What? How?

June—Household appliances.

July—Making a budget.

COMMUNITY MEETINGS.

November 6—Town Hall at 7.30 P.M., Rowley.

November 11—Grange Hall at 6.00 P.M., Amesbury.

November 12—Grange Hall at 7.30 P.M., Newbury.

November 14—Boys' club building at 12 M. Haverhill.

November 14—Home of Andrew Longfellow, 7.30 P. M., Groveland.

November 18—Grange Hall, West Andover, at 2 P.M.

November 19—Town Hall, at 7.30 P.M., West Newbury.

THE AMESBURY GAME

The first game of the regular football schedule was played on October 11 at Amesbury and resulted in a defeat for the Aggies by the score of 29-0. The boys from the County School had had only one week of practice, on account of the late opening of the school, and were further handicapped by the absence of five regular men from the line. The team work was ragged, the only bright spots being in the apparently latent power of the line and the possibility of developing a speeding backfield around Herrick and Whales, as a nucleus.

For Amesbury, the work of Murphy at quarter back was sensational. This one man, together with Barlow at end, were directly responsible for their team's victory.

The football management announce the scheduling of a game with Marblehead on Armistice Day at Marblehead at 10 a. m. The showing made by the Aggie boys against Beverly was directly responsible for the willingness of the Marblehead advisory board to put Essex on their schedule on an important date.

THE IPSWICH GAME

On October 25 the Essex Aggie team won their first victory of the season by defeating Manning High School of Ipswich in an easy game by the score of 38-7. The Ipswich score was made against the second team men who were put in during the third quarter to get a chance to try their skill against opponents. The all around playing of the Aggie team, especially in the ability of the line to open holes for their backs, was the feature.

THE BEVERLY GAME

On October 18 the Essex Aggies outplayed and, but for penalties for minor infractions of the rules, would have defeated the strong Beverly High School eleven. The final score was 12-6 for Beverly. The scores forecasted by various papers ran as high as 49-0 for Beverly, and the Aggie boys were on edge to show the doubters that their team this year is as strong as any high school aggregation in the county. In the first period Foley, Aggie quarterback, proceeded to do some of the showing by scooping up a fumbled punt and racing 30 yards for a touchdown. From then until the fourth period the game was very exciting, our boys gaining more ground than their opponents, but

GRADUATION.

The annual graduation of the Essex County Agricultural School Class of 1919, will be held on Tuesday, Nov. 25, at 2 P. M. Classes from both the Agricultural and Homemaking Departments will receive their diplomas. A speaker of prominence will address the graduating class.

The Alumni will hold an especially important reunion meeting in the evening. With the nearly complete return of men who have been in the service a specially enjoyable reunion is anticipated.

Detailed announcements of all Graduation Day events will be mailed early.

losing more on penalties. The Beverly touchdowns were hard-earned.

The team work of Aggies was immensely improved and leaves a hopeful feeling in the minds of their well-wishers that remaining games on the schedule will be victories for the Green and White. The backfield interference was excellent and to that fact alone much of the ground gaining ability of Herrick and Whalen was due.

For Beverly, the playing of Akerly and McCleod featured. The summary:

BEVERLY H. S.: Harrington, le; Akerly, lt; Corniskey, lg; Ganley, c; Lewis, rg; Semons, rt; Donnolly, re; Moffett, qt; Bell, lhb; McCleod, rhb; Hilyard, rb.

ESSEX AGGIES: Moreland, re; Cassano, rt; Ives, rg; Hersey, c; Rogers, lg; Osborne, lt; Raddin, le; Foley, qb; Herrick, rhb; Whalen, lhb; Ward, rb.

Score—Beverly H. S., 12; Essex Aggies, 6. Touchdowns: Bell, Moffett, Foley. Substitutes: Beverly, Fitzgibbon, rg; Dowling, rt; McCauley, le; Edwards, lg. Essex Aggies—Peabody, rg; Peach, lg; Holden, le; Sargent, rt. Umpire—Birmingham. Referee—Lewis. Head linesman—Berresford.

Time—Two 10 and two 12-minute quarters.

BEEKEEPERS TO GET SUGAR.

In order to save weak colonies of bees which would otherwise starve during the winter, the Commission on the Necessities of Life, through the State Department of Agriculture, has made arrangements for beekeepers to obtain the necessary sugar for the feeding.

Beekeepers in Essex county who find it impossible to get sugar for feeding bees should get in touch with the Department of Agriculture, State House, Boston, or County Agricultural Agent, Hathorne, Mass.

PRICE OF MILK JUSTIFIED.

The Commission on the Necessaries of Life, after a "careful and exhaustive study," have reported that a price of 10c per quart for milk delivered in Boston is not unreasonable. After the freight is paid this does not leave very much profit for the Essex County Farmer with prevailing prices of feed and labor. From figures recently obtained in this county it is costing the average farmer 12c per quart to make milk. If the general public could really understand the ridiculously low price per hour which the average farmer gets for his labor, they would not complain about a cent a quart raise in the price of milk. Milk at 20c per quart is the cheapest food on the market today. With shoe cutters demanding \$45 for 44 hours' work what would be the price of milk if the farmer asked for a similar wage for the 70 hours per week that he puts in?

AGRICULTURAL ADVISORY COUNCIL MEETING.

(Continued from Page 1.)

lowing methods: Cooperative Buying, Raising Home Grown Foods, The elimination of Live Stock which cannot demonstrate its profitability.

The Council was particularly enthusiastic over a campaign to reduce the number of scrub bulls in the county, replacing them with sires of known breeding.

A committee consisting of Dr. J. B. McDonald of the Danvers State Hospital, L. G. Dodge of West Newbury and George Averill of Andover was appointed to make a general plan of the county campaign.

The date of December 3 was approved for the Annual Farm Bureau meeting, and it is the earnest wish of the Council that all farmers of the county make an extra effort to be present at this meeting.

County Board of Trade Meeting.

(Continued from Page 1.)

canvass, attempting to determine the most desirable location in the county for such a plant. They further propose to get in communication with many of the leading farmers with a view of obtaining an estimate of the average amount of space which they might wish to engage per year. There is no doubt in the minds of the committee that all of the space could be easily disposed of among other interests, as grocers, commission men and the like. The greatest good to the consumer, however, would probably be served by assisting farmers in solving this serious problem.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 1

HATHORNE, MASS., DECEMBER, 1919.

No. 8.

ANNUAL MEETING OF FARM BUREAU.

The annual meeting of the Essex County Farm Bureau will be held at the Agricultural School, Hathorne, on Wednesday, December 3, 1919, at 10.40 o'clock. A very interesting program for both men and women has been arranged and all persons interested in farming, home economics, or club work are cordially invited to be present. Altho there will be something of interest to everyone thruout the day, the feature of the meeting may be the appearance of President L. K. Butterfield of the Mass. Agricultural School of Amherst, who is expected to be the principal speaker.

All should avail themselves of the opportunity of hearing this talk.

The complete program follows:

10.40—Cooperative Buying for Farm and Home Products. L. P. Jefferson.

11.00—Sectional Meetings.

I—Agriculture.

A—Cooperative Buying. S. N. Stimson, chairman.

B—Poultry. J. S. Carver, chairman.

C—Field Crops. Earl Jones, chairman.

D—Dairying. R. B. Cooley, chairman.

II—Home Economics.

A—Household Management, Kitchen Planning Accounts and Budgets. Mrs. J. J. Shannahan.

B—Food; Its Right Use, The School Lunch, Preservation. Mrs. Lawrence Bodge.

C—Hygiene, Child, Dental. Mrs. George W. Towne.

D—Clothing, Health Standards, Time and Labor Saving Methods. Mrs. C. W. Paul.

E—Millinery. Mrs. Hooper Shaw.

III—Club Work.

State Leader Farley, (M. A. C.) in charge.

12.00—Demonstration—Selection of Herd Sire. Prof. R. B. Cooley, (M. A. C.)

12.30—Basket Lunch. Coffee will be served.

1.15—Business Meetings and Reports of Home Demonstration Agent, County Agricultural Agent, and County Club Leader.

2.30—World Agriculture.

HOME SLAUGHTERING OF PIGS

Just before the holiday season there usually comes a day on the farm known as "butchering day." In preparation for this the knives are sharpened, the pork barrels cleaned and made ready for a fresh supply, the basement or barn floor swept and cleaned for the butchering and the tackle and falls put in place for hoisting the carcass.

On the morning of butchering day two wash boilers full of water should be set on the stove and heated in readiness to scald the hogs as soon as killed.

The most humane method of killing is to shoot the hog through the brain, just back of the ears and then immediately lay him on his back and, with a narrow bladed knife about 8 inches long, insert it just in front of the breast bone in line with the back bone with the blade pointing directly toward the butt of the tail. Insert the knife about 6 to 8 inches and give it a slight turn to sever the arteries. Do not pierce the heart because then the blood will not be pumped from the arteries.

As soon as "bleeding" is completed, pour a little hot water over the body and sprinkle some powdered resin all over the surface and within the ears, rubbing it enough so that it will go beneath the bristles on to the skin. The hog is now ready to scald. For scalding a large barrel or one-half a molasses hogshead which has been cut in two at the centre, should be employed. Have the water at such a temperature that by dipping the finger three times in succession, the heat will sting the third time. Pour enough of the water into the barrel so that the hog can be completely submerged. Cut a hole about three inches long between the tendons and the shank in each hind leg, insert a gambrel (a stick about 2½ feet long, tapering from the centre to the ends) into these holes, hook the tackle and falls to the centre of the gambrel. The hog can now be easily hoisted and lowered into the barrel of water. After remaining in the water about three minutes, the body can be removed, laid on the floor or a platform and the bristles can be readily scraped off with a knife. As soon as the

WHAT ABOUT LUNCH FOR THE CHILDREN?

Are you interested in the welfare of the children is your community? If so, have you looked into the lunch conditions in your school? How many children are eating a cold lunch every noon? Wholesome food is perhaps the most important factor in the development of the child, for children who are not properly nourished are retarded in growth, both physical and mental.

Most mothers realize that the lunch packed in the morning and carried to school to be eaten at noon, is far from satisfactory both to herself and to her children. The child soon tires of the cold lunch and less and less is eaten. The monotony may be remedied by having a hot dish prepared at school. A cup of cocoa, or soup, with the cold lunch helps to make it more palatable and a better meal will be eaten. This will result in the improved physical condition of the school children, and teachers tell us that they do better mental work when a hot dish is served.

In nearly every case where there is a hot lunch served at school, local women's committees helped in organizing and carrying on the lunch. The problem of planning, preparing and serving the midday meal for the child in school will vary with each school, the equipment of the school, and many other factors, but in no town are the problems so complex that the warm lunch should be considered an impossibility.

bristles are removed the hog can be raised to a convenient height by means of the tackle and fastened by tying the rope to some stationary post.

To open the body, begin by cutting through into the upper part of the abdominal cavity. Then cut down the median line of the belly, being careful not to cut into the intestines. Remove the intestines and other internal organs, saving the liver and heart for eating purposes. By means of a sharp axe or meat saw, cut down the back through the centre of the back bone. Allow the carcass to hang over night to cool at 30 to 40 degrees F. and it is ready to be cut up as desired.

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CALENDAR.

Dec. 2, 3 P.M. — Andover-Punchard High School. Household Account Group meets for Meat Cutting Demonstration. All welcome.

Dec. 2, 10.40 A.M. — Annual Farm Bureau Meeting Essex County Agricultural School.

Dec. 5.—Clothing Group, West Andover begins work.

Dec. 13.—New England Home Economics Association Hall of Boston Public Library, Boston. Speaker, Mr. Schuyler F. Herron.

Dec. 15.—Annual Conference of Farm Bureau Agents, Agricultural College, Amherst, Mass.

The changes in local farming conditions should be a matter of more than ordinary note. There have been a good many changes of ownership. Farms which have been continuously in the hands of one family for generations are now being sold. The plans of management on many farms are changing. More land has been seeded into permanent mowing during last fall than in any single year. The number of milch cows kept on Essex county farms steadily continues to decrease. Attempts to purchase fresh stock from the North is meeting with only fair success. Many farmers frankly say that they do not propose to have their business put in the unfavorable position which it has been on account of labor during the past season. We are not alarmists, but we believe that everybody, and particularly city consumers, should know just what the conditions are. In the time of a reduced food supply the city population naturally feel the pinch first.

THE SCHOOL LUNCH.

The Home Demonstration Agent will gladly help in organizing the work of preparing school lunches. The women of every community may well take up this matter of serving a warm dish to the school children carrying a cold lunch.

HOMEMAKING DEPARTMENT NOTES.

The Thursday morning assemblies continue to be full of interest. The Cooking Specials of the High School group took the opera "Il Trovatore" for their subject, telling the story and illustrating it with victrola selections. The Sewing Specials transformed themselves into witches on Hallowe'en morning and stirred a cauldron placed in a beautiful setting of corn shocks and autumn leaves. Out of the cauldron came good or ill fortune for every girl. The second year girls in wonderful old fashioned costumes made the lessons and discipline of the old-time district school very vivid.

Miss Stratton of the Farm Bureau spoke to the girls recently on keeping Household Accounts. As a result six girls are keeping accounts for their mothers at home and two have interested friends in starting household accounts.

A Thrift Club of 35 members has been formed and has purchased \$35.00 worth of thrift stamps.

Elizabeth Brown and Helen Young of the High School group are teaching cooking to the classes of girls at the Peabody Community House. One class of boys has also been formed.

Mary Stephenson of '19, who has been working all summer at the North Shore Baby Hospital, has been employed by a family in Gloucester to care for a little child.

Elinor Ward, '19, is employed as mother's helper by Mrs. J. S. Leary, Jr. of Peabody.

Blanche Burnham, '19, is building up something of a dressmaking business at her home in Essex.

Edwina Hodges, '18, is employed at Gregory's Seed house, Marblehead.

Evelyn Bodge, '18, has entered the mail order department of Daniel Low & Company, Salem.

Gertrude McCormick, '17, who has been employed as stenographer by the Brockton Family Welfare Legion, is now working at the office of the Boy Scouts' organization in Quincy.

On Saturday afternoon, October 25th, the class of 1917 attended the very pretty home wedding of Linda Hoyt, '17, of Georgetown, and William Walker Ladd. Mr. and Mrs. Ladd are living at 51 Yale street, Bridgeport, Connecticut.

Do not forget the sectional meeting on December 3d at the Essex County Agricultural School dealing with Boys' and Girls' Club work.

A FARM BUREAU MEETING IN YOUR TOWN.

At the recent meeting of the Farm Bureau Council the plan of holding a meeting of the county was endorsed. The plan which worked so well last year is as follows:—The local Farm Bureau committee arranges for a meeting to which all the interested men and women are invited. The County Agricultural Agent, Home Demonstration Agent, County Club Leader, and the County Poultry Specialist report briefly on their work. The men and women divide themselves into groups and projects for the coming year are discussed. For each project which is of special interest to the people of the town a project leader is appointed to work with the County Agent in starting the work.

Pig clubs, poultry culling work, or any other phase of Farm Bureau work may be handled with definite aims and results. The most important step is to have a large attendance of interested people who can help shape any plans which are to be carried out. About twenty such meetings will be held in the county before December 1, 1919. The Saugus, Merrimac and Byfield committees are already active, and have held very successful meetings. The following meetings have been scheduled and arrangements for several others are nearly completed. West Peabody, at the School hall, November 5, at 7.30; Rowley, at the Town Hall, November 6, at 7.30.

At the annual meeting on December 3, the results of the meetings will be discussed and a County Agricultural program agreed upon, based on the demands of the local groups. Can anyone conceive of better plan for boosting Essex County agriculture. Let's all pull together for better things in farming and keep the industry where it is, the best occupation in the world.

THE MERRIMAC FARM BUREAU MEETING.

On Tuesday evening, October 21, about 25 Merrimac farmers held a very valuable meeting at the Grange Hall. Reports of results with Soy Bean plots were given by John K. Sargent, Edson Walker and Oscar Poland. Edson Walker reported on his potato demonstration. County Agent Gaskill outlined briefly the work of the Bureau and discussed projects for 1920. Merrimac farmers are particularly interested in cooperative buying

(Continued on Page 4.)

WITH THE FARM BUREAU

PORK PRODUCTS.

Soon the housewife will have to think about caring for the pork to be used for the family. Cleanliness is most important as meat very easily becomes tainted.

The leaf lard is the best quality—the back strips of the side the trimmings of the ham, shoulder and neck also make good lard, and may be rendered with the leaf. The intestinal fat is an inferior grade and should be rendered by itself. Wash well before cooking.

Save all pieces of meat for sausage.

All waste fat trimmings and skin should be rendered, and the product used to make soap. Bones should be crushed for chicken feed.

Remember the seasoning of sausage is generally governed by taste. Fresh sausage can be kept under a covering of lard for a number of days.

Farmers' Bulletin No. 913 on "Killing Hogs and Curing Pork" may be had by writing the Farm Bureau office at Hathorne.

Mrs. Warren Osborne of Middleton, Mass., kindly sent in the following recipe of sausage meat which she says has been very satisfactory:

- 20 lbs. meat, ground (medium knife)
- 5 ozs. salt
- 2 ozs. pepper
- 1 oz. sage
- 1 tablespoon ginger.

Allow to stand over night—pack in cheese cloth bags.

The Home Demonstration Agent is glad to receive recipes or suggestions which will be of benefit to other women in the county.

A FARM BUREAU MEETING IN YOUR TOWN.

The Local Farm Bureau committees in the various towns of the county have been very active the past month and several very interesting meetings have been held. At these meetings suggested lines of Farm Bureau work were discussed and definite projects for the coming year decided upon for both the men and women. Brief reports of some of the meetings follow:

Saugus, October 16, 1919.

Discussion of projects by County Agricultural Agent, talk on Cooperative Buying by S. N. Stimson. Committee on cooperative buying appointed, Messrs. Stillings and Metcalf. Farm Bureau work the past year in Saugus included Soy Bean plot, Penney Bros., Topdressing grass demonstration, C. E. Stillings, Pruning dem-

onstration, E. E. Metcalf, three agricultural meetings and numerous farm visits.

Merrimac, October 21, 1919.

Reports on Soy Bean plots, Messrs. Walker, Poland, and J. K. Sargent; potato demonstration, Edson Walker. County Agent Gaskill outlined possible projects and a lively discussion followed. Project leaders appointed as follows: Cooperative Buying, J. K. Sargent and Leonard Sargent; Dairying, Edson Walker; Potato variety test, Homer Sargent and Edson Walker. A very interesting meeting, attendance 25.

Byfield, October 29, 1919.

At this meeting both men and women were present but held separate meetings. Miss Stratton, Home Demonstration Agent, and Miss Bedford the visiting nurse from Danvers, spoke to the ladies. There was much interest in the hot school lunch, and Miss Ethelyn Howard, Principal of the Byfield school, was made leader of the project. Messrs. Gaskill and Stimson addressed the men. Committee on cooperative buying appointed, Messrs. Caldwell, A. Pingree, Elwell, Macdonald and Boyden. Attendance 40.

Rowley, November 6, 1919.

Discussion of projects by Poultry Specialist Carver, and Messrs. Gaskill and Stimson. Mr. Bradstreet was appointed project leader in poultry work. Miss Stratton discussed home demonstration work with the women. Definite lines of work was not decided on, though there was much interest in the clothing and millinery groups being held in the county.

Amesbury, November 11, 1919.

A very interesting meeting held in connection with annual meeting of the Amesbury and Salisbury Agricultural Society. Reports of Farm Bureau work the past year were given as follows: Cooperative buying, Willis Austin; Orchard team work, Edward Bartlett; Alfalfa plot, J. L. Stewart; Potato variety test, H. Rudd and W. Evans. Plans for the coming year to include cooperative buying, pruning, demonstrations, etc., W. Austin, leader. Miss Stratton told the ladies about some of the projects and how they were being worked out in other communities. Mrs. W. L. Cutter was suggested as the leader for Home Economics in connection with the Farm Bureau. Some interest was shown in the project on Household Management, and in clothing.

Newbury, November 13, 1919.

A well attended meeting with much interest shown. Discussion of Farm Bureau work by County Agent Gaskill. Mr. Stimson spoke on the Essex County Cooperative Farming Association. Prof. W. R. Cole (M. A. C.) talked on apple by-products and served bread and apple butter. Mr. Ernest Knight was appointed leader in cooperative buying and orders for a car of grain, car of lime, several bushels of seed potatoes and several barrels of flour were taken. The ladies present were interested in the Clothing and Millinery projects and are going to talk the work over with other women in the town. If enough are interested in forming a group for either of these projects the work will be started after January first.

Haverhill, November 14, 1919.

Dinner was served at 12.30 by Chas. Goodwin, the agricultural supervisor. Reports of work the past year given as follows: Farm accounts, C. Gleason; Alfalfa, J. B. Sawyer. Mr. Stimson told of the creditable work in the cooperative buying done by the Haverhill men under the leadership of Mr. Gleason. Mr. Carl Smith of the N. E. M. P. A. discussed milk marketing. Mr. Stackpole of the Chamber of Commerce spoke in their interest in agriculture and the work of their agricultural committee. County Agent Gaskill discussed projects for the coming year. The cooperative buying is to be continued under Mr. Gleason; two cars of lime were ordered. Arrangements were made for demonstrations on poultry culling and pruning fruit trees.

Groveland, November 14, 1919.

Meeting at the home of Andrew Longfellow. List of projects discussed informally. Plans made for pruning demonstrations.

West Andover, November 18, 1919.

One of the best meetings of the year. Andover people can always be depended upon to show interest. Reports on Cooperative buying by W. B. Corliss, Potato plots by Messrs. Averill, Corliss, Bailey, Gould, Abbott, Barnes and others. Soy Bean demonstration, Messrs. Barnes, Abbott, Boyce. A record was broken when 31 additional shares in the County Cooperative Association were purchased. Andover has purchased at least a car of grain every month the past year at a considerable saving. Plans were made for the demonstration work the coming year.

In the women's section it was decided to form groups in clothing and

millinery. Mrs. P. C. Mocar will be the leader for the spring millinery group. The group for clothing has been organized, and Mrs. James Feehey of Andover will be in charge. The first meeting will be held November 21st.

West Newbury, November 19, 1919.

A well attended meeting. Reports were given on potato plots by Messrs. Dodge and Macdonald. Alfalfa plots, Messrs. Sullivan and Sawyer. Co-operative buying was discussed. Interest was shown in poultry culling, orchard team work and potato variety tests for next year. A car of lime for spring delivery will be purchased.

Clothing and millinery projects were chosen by the women. Mrs. Reed, Assistant State Leader, will give clothing work after January 1st. The leader for the millinery in West Newbury will be announced later.

BOYS' AND GIRLS' CLUBS.

The 1919 club work dealing with the Home Economics club, Winter Egg Laying Contests, Spring Egg Laying Contest, Garden Clubs, Pig Clubs, Calf Clubs and Canning Clubs is almost finished, and the 1920 club work has begun. The following data will give some idea about the amount of club work done the last year: Projects handled, 7; enrollment, 1119; clubs organized, 58; meetings held, 309; present at all meetings, 7001; number of demonstrations given, 132; number of personal visits to homes of members, 1316; personal letters sent out, 894; circular county letters sent out, 7109; circular state letters sent through the county office, 5030; office calls, 168; telephone calls, 153; number of members exhibiting at fall fairs and local displays, 508. All who attend the Annual Farm Bureau meeting December 3, at the Essex Agricultural School will hear a full report of the 1919 Essex County Club work.

Attention is called by the County Leader to the important and interesting Farm Bureau meeting that will be held December 3d at the Essex Agricultural School, Hathorne (Danvers). This meeting will deal with county wide Boys' and Girls' Club Work, and the following club workers will take part: Mr. George L. Farley, State Junior Extension Leader, Rev. Edward Disbrow of West Boxford; Clinton F. Goodwin, Haverhill City agricultural supervisor, and Miss Marion Parker, charge of club work in Manchester and Beverly. All persons interested in boys' and girls' welfare are cordially invited to attend this meeting.

GRADUATION EXERCISES

November 25, 1919.

2 P. M.

1. Invocation.....Rev. F. J. Ward
2. American Hymn.....Keller
School Chorus.
3. (a) A Year's Project in Agriculture.....Calvin E. Poore, '20
(b) An Agricultural Student as Garden Supervisor,
Gilbert E. Tucker, '19
4. Boys' Glee Club.
5. (a) A Summer Project at Home,
Blanche S. Burnham, '19
(b) A Summer Project Away from Home,
Mary E. Stephenson, '19
6. Girls' Quartette.
7. (a) Presentation of Gold Prizes offered by Mrs. R. S. Bauer for excellence in Summer Projects in Home-making.
(b) Presentation of Gold Prizes offered by Ralph S. Bauer for Agricultural Project accomplishment.
Presentation by R. W. Stimson, Agent State Board of Education.
8. Praise to the Soldier.....Boieldieu
School Chorus.
9. Address—Forward in Education and Agriculture,
F. M. Lewis, Dean, Massachusetts Agricultural College, Amherst.
10. Presentation of Diplomas,
J. C. Poor, President Board of Trustees.
11. (a) Ring Out Sweet Bells of Peace.....Caro Roma
(b) America
12. School Song.

LIST OF GRADUATES

Blanche Story Burnham, Essex; Ruth Thaxter Estes, Groveland; Dorothy Hamilton Hodge, Danvers; Edith Riggs, Essex; Mary Elizabeth Stephenson, Gloucester; Elinor Hitchcock Ward, Ipswich; Jacob J. Begin, Danvers; Edwin Emil Bergstrom, Lynn; Ernest Raymond Bloom, Lynn; Roy Dudley Cushing, Danvers; Ralph Tufts Frisbee, Amesbury; Roy Theodore Johanson, Lynn; John Albert Holmstrom, Salisbury; Robert Edward Nelson, Gloucester! Byron Dupree Raymond, Beverly; Irene T. Richard, Salem; Gilbert Edwin Tucker, Beverly; Raymond Herbert Witham, Peabody; Ralph Merrill Woodworth, Rowley.

PREPARE FOR THE CENSUS

The United States Agricultural census will be taken in January, 1920. This continues Uncle Sam's method, begun in 1840, of taking stock of his people and their business every ten years. It is not too early to prepare for the enumerator by taking inven-

ories of live stock, farm equipment, crops and animals raised and sold during the past year.

The census is a vital matter and its statistical value depends largely on the accuracy of the information obtained. Meet the enumerator cheerfully, and give complete and accurate answers to all questions. Blank census schedules may be obtained from the School, which if carefully filled out before hand, may be copied by the census taker, when he makes his visit in January.

SCHOOL NOTES.

Manager Roy Osborne of the hockey team promises some interesting contests in this line of athletics. Whalen has been chosen to captain the team this year and Instructor Hathaway has offered to coach the boys.

The school orchestra has organized under the direction of Instructor Gifford. The following students have attended rehearsals which are held on Monday and Wednesday afternoon at 3:30: Piano, Miss Hartman; cornet, Ward; mandolins, Swanson, Carlson; drums, Murray, Whalen, Hennessey.

The 1920, 12 months' Poultry Contest drive was carried on during the week of October 20th. With the assistance of Mr. Nodine, State Poultry Leader, 15 talks were given in seven sections of the county to approximately 780 boys and girls. The enrollment in this contest shows that twice as many boys and girls have joined this year as compared with last year, and twice as many clubs have been organized.

The English Language.

It is estimated that over 140,000,000 people now speak the English language, over 51,000,000 the French, 75,000,000 German, 35,000,000 Italian, 42,000,000 Spanish, 13,000,000 Portuguese and 75,000,000 Russian.

MERRIMAC FARM BUREAU

(Continued From Page 2)

of grain, lime and fertilizer, and appointed a committee consisting of Leonard Sargent and John K. Sargent, to look into the matter. Edson Walker was appointed project leader in dairy improvement. Homer Sargent and Edson Walker will cooperate in a potato variety test. Other matters discussed were farm accounts, use of acid phosphate with manure and livestock improvement by use of a sire of merit.

The success of this meeting was due to the careful work of the Merrimac Farm Bureau Committee, J. K. Sargent, A. K. Roberts and Homer Sargent, who made all arrangements for the meeting in a very satisfactory manner.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. I

HATHORNE, MASS., JANUARY, 1920

No. 9

ANNUAL FARM BUREAU MEETING.

By far the best Farm Bureau meeting ever held in Essex County took place at Hathorne, on Wednesday, December 3, 1919. More than 300 enthusiastic farm men and women attended the meeting and took hold of the work with a zest. It was a select gathering with only one purpose in view, that of making Essex County farms and homes more remunerative and attractive. From the time that Director Smith introduced Miss L. P. Jefferson of the Massachusetts Agricultural College, who talked on co-operation, until Mr. Willard, Director elect of the Extension Service of M. A. C., had finished his timely talk on the place of agriculture in the economy of things, there was a very full program.

At the sectional meetings in the morning the men discussed the problems of Cooperative Buying, Field Crop Improvement, Better Methods in Poultry Keeping and Livestock Improvement, while the ladies discussed Labor Saving equipment for the Home, the School Lunch, Clothing, Millinery, and Health topics. Miss Laura Comstock, State Leader, explained the organization of Home Demonstration work, and the State Club Leader, Mr. Farley, discussed the various phases of boys' and girls' club work.

The afternoon session was in charge of Mr. J. N. Dummer of the Advisory Council, and he had a lively time getting onto the program everything that was scheduled. The Home Demonstration Agent, Miss Stratton, County Agricultural Agent Gaskill, and Club Leader Howard, reported briefly on their work of the past year. These reports were strengthened greatly by the fact that the leaders in various towns in the county were asked to report on definite projects and demonstrations, which had been carried on in their towns.

The chairmen of the sectional meetings made recommendations for the coming year; Mr. Stimson on the Cooperative Buying, Mr. Jones on the

(Continued on page 6)



From Iowa. Earlier Students Will Recognize This Man.

ALUMNI MEETING.

Some of the most pleasing features connected with the annual graduation gatherings. In the first place, the Alumni Association had an enthusiastic and well attended business meeting. A splendid set of officers was elected to carry along the work of the Association and many plans and details were perfected. Among the various things accomplished was the selection of an Alumni editor to prepare material and represent this interest in the columns of the "Essex Farmer and Homemaker." Mr. O. A. Olsson of Lynn was elected to this position. The Association further decided to elect a representative to the Advisory Board of the Alumni Association of the School. Again, the Association appointed a committee consisting of: Chapman, '16; Miss Curtis, '18; Tucker, '19, to co-operate

(Continued on page 5)

ESSEX COUNTY BOYS' AND GIRLS' EXHIBIT AT BOSTON POULTRY SHOW.

The 1920 Poultry Club members of Essex County are planning to help make the club section at the Boston Poultry Show, "the best ever." Already a number of members have sent in their entry blanks showing that they will exhibit some of their prize birds or their best dozen eggs. In addition to the poultry and egg exhibit, two Poultry Judging Teams and one Poultry Demonstration Team will be sent from Essex County to compete for silver cups with other judging and demonstration teams of the State. All three teams are being trained at the Essex County Agricultural School by Instructor Hannaford. There are three silver cups offered as follows: one for the most efficient demonstration team, one for the most efficient judging team, and one for the best individual poultry judging work.

After figuring out. Hugh Parkhurst's 1918 Poultry Record Book, we find that Hugh made \$6.06 per bird during eight months, or \$145.44 on his 24 birds.

During the week of December 8, Miss Helen Norris, State Girls' Club Leader, and the County Lealer, visited the following places and talked to boys and girls in the interest of the 1920 Home Economics Club; Orphans' Home Lawrence; Central School, Middleton; Manchester Food Centre; Essex County Agricultural School, Homemaking Department; Maple Street School, Danvers; Beverly Health Centre; Junior High School, Amesbury; Winthrop School, Ipswich; Central School, Wenham, and four schools in Haverhill.

In every section the girls appeared very much interested in this new project. With the good local leadership that has been obtained, the County Leader is looking for excellent work in both the bread making and sewing clubs.

JANUARY 23.

Save this date for the minstrel show and dance of the Athletic Association.

ESSEX FARMER and HOMEMAKER

HATHORNE, MASS.

Published by the Trustees of the Essex County Agricultural School.

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SUBSCRIPTION FREE

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BOARD OF PUBLICATION.

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Ralph H. Gaskill, County Agricultural Agent.
George E. Gifford, Agricultural Department.
Elizabeth C. Jenkins, Homemaking Department.
Olaf A. Olsson, Alumni Editor.
Gladys E. Stratton, Home Demonstration Agent.

CALENDAR.

December 30-January 3—Boston Poultry Show.

January 19 to 23—Mass. Union Farm Meeting. Meeting of Agricultural Organization arranged by State Department of Agriculture, at Horticultural Hall, Boston. Also State Corn Show. Ample prizes. Write Commissioner Gilbert, State House, for program.

January 23—Minstrel Show and entertainment at School, given by Faculty and Students for benefit of Athletic Association.

March 10—Seventh Essex County Farmers' Day at Agricultural School. Also Essex County Corn Show, Agricultural School.

EDITORIAL

It would seem that the editorial and special article writers of some of our leading city dailies should have time given them for a study of real farm conditions and problems. Some of these editorials have been so manifestly unfair and even untruthful to the fact as to really call for some sharp and cutting replies.

To one who knows a few of the problems which the farmer has had to meet during the past season, a great number of these criticisms seem to be manifestly unjust. We wonder if Mr. City Man realizes that the farmer is paying from two to four times as much for grain as during the pre-war times. Labor has been so variable, unstable and fleeting that farmers have planted in hope and reaped too often in disappointment. Stable manure is very scarce, and

fertilizers and other factors in production expensive and unreliable. We have in mind a prominent farmer who never feels, when his farm help leaves on Saturday night, any security or promise regarding their return on the following Monday morning although he pays liberal wages, because he is in direct competition with the strongest mill center in the county.

Many farmers were unable to harvest a fine crop of apples this fall because of the scarcity and high price of labor. Consequently, a large percentage of the splendid local crop was wasted or so injured as to reach the market far below the grade for which it was fitted. Again, many of the market garden crops sold at ruinous prices. Imagine the feelings of the farmer who was forced to sell cabbage at 65c per barrel when he knew that that same cabbage had cost him nearly \$2.00 per barrel to raise.

Let the city consumer further realize that many other charges are added before food reaches his home and these have been fully as heavy as have been the farm charge.

In conclusion, let us all remember that one of the strongest factors in solving the H. C. L. will be abundant crops produced under favorable conditions and until such a goal is reached, we shall still be a long way from the ideal.

BAUER PRIZES.

At the recent Graduation, the Bauer prizes were presented by Mr. Rufus W. Stimson, of the Massachusetts Board of Education. Unusual interest was manifest because of the keen competition among the students, thus testifying to the value of these generous incentives. The awards were as follows:—

Agricultural Department.

First prize, Gilbert E. Tucker, Beverly, Garden Supervisor, \$20.00; second prize, F. Maynard Tucker, Gloucester, Market Garden Project, \$10.00; third prize, Calvin E. Poore, West Newbury, Live Stock Project, \$10.00; fourth prize, George E. Garland, Andover, Vegetable Garden Project, \$10.00. Honorable mention:—Harold Holden, Peabody; Harold Hansen, Beverly.

Judges.

Mr. George C. Thurlow, West Newbury; Mr. J. N. Dummer, Rowley; Mr. Stuart Little, Newbury.

Homemaking Department.

First prize, Helen M. Lewis, Andover, House Work, \$15.00; second prize, Elinor H. Ward, Ipswich, Cooking, \$5.00; third prize, Margaret B.

Wallace, Ipswich, Waitress, \$5.00; fourth prize, Mary E. Stephenson, Gloucester, Baby Hospital, \$5.00; fifth prize, Janet Stanley, Danvers, Baby Hospital, \$5.00; sixth prize, Blanche S. Burnham, Essex, Berry Picking, \$5; seventh prize, Rachael T. Foster, North Andover, Canning, \$5.00; eighth prize, Viola Haszard, Wenham, Canning, \$5.00.

Judges.

Mrs. George W. Creesy, Salem; Miss Gertrude Emery, Lynnfield; Mrs. C. W. Paul, North Andover.

HOMEMAKING DEPARTMENT.

The Thrift leaven is working. The purchase of thrift stamps goes on and the girls realize they must earn in order to save. Many have secured work for pay during the Christmas vacation.

Ten girls from the Third Year class and the High School Special Group have volunteered to act as Leaders of the County Home Economics Clubs in Cooking and Garment Making under the supervision of Mr. Ernest Howard, County Club Leader. During the past month they have had conferences with Mr. Farley and Miss Norris of Massachusetts Agricultural College and with Miss Parker of Manchester, who is helping them work out the program for their meetings.

The First Year girls have presented two short plays for the Thursday morning assemblies during the past month.

The Third Year girls prepared the supper for the football team celebrating the close of the season. The boys showed their appreciation of the cooking both by their appetites and by the presentation of a huge and beautiful box of chocolates—a present which was very pleasing.

The piano still continues to be a source of unflinching good cheer. It is in constant use before school, after school and noon times. Every one wonders how school ran without it.

A NEW YEAR'S RESOLUTION.

Resolved:—That I will get one of the Massachusetts Farmers' Account Books from County Agricultural Agent, Hathorne, and will keep it faithfully. Why not? The County Agent will help you start it, and close it next January.

SAUSAGE MEAT.

20 lbs. Meat, ground—(medium knife.)

5 ounces Salt.
2 ounces Pepper.
1 ounce Sage.
1 T. Ginger (tablespoon.)

Allow to stand over night—pack in cheese-cloth bags.

REPORTS OF FARM BUREAU STAFF

DEVELOPMENT OF ORGANIZATION.

The increasing interest and co-operation of the farmers of the county in Farm Bureau work during the past year has been most gratifying. The work of the Advisory Council in shaping projects, the assistance of the local Farm Bureau Committees in arranging meetings and demonstrations, and the cooperative spirit of the individual farmers in carrying out demonstration work, have been the means of making the steady progress which we feel has been made. One County Agent working alone in a county can accomplish very little, but all the farmers of the county working with the County Agent are a tremendous power in putting the business of agriculture on to a progressive and satisfactory basis. The project plan of organization as it is developing in several towns, offer an excellent means of placing the work on a definite and permanent basis.

I. SOIL IMPROVEMENT

A. Use of Lime:—That the use of lime by farmers of the county is increasing rapidly is shown by the fact that 40 carloads were purchased co-operatively the past year. The evidence of its value is shown by the improved appearance of the crops grown where it was used. Land newly seeded to clover, timothy and alfalfa demonstrates its value particularly well.

B. Clover and Alfalfa:—Growing of clover and alfalfa as soil improvers and cattle feeds is becoming general. At present grain prices, clover and alfalfa hay are worth from \$40 to \$50 per ton as a cow feed. Some difficulty has been experienced in curing these crops when grown alone, but when they are cut in the middle of the day and cured under caps a high grade feed is obtained. We need to grow more of these crops. In growing alfalfa very careful attention must be paid to the inoculation.

C. Soy Beans:—Soy beans when grown in corn and ensiled have proven themselves to be a very desirable feed and soil improver. The demonstrations this year have proved conclusively that the soil and glue method of inoculation is entirely satisfactory, while the culture method is uncertain. From the fact that a satisfactory method of inoculation has been found and for the reason that soy beans are easily grown with the corn, and are equal in feeding value to alfalfa, it is believed that an increased acreage will be planted next

year. The Medium Green is the most desirable variety.

II. COOPERATIVE BUYING.

Rapid progress has been made by the Essex County Cooperative Farming Association the past year. The Association is made up of a group of farmers of the county who have gathered together, formed a stock company, and hired a manager to purchase their supplies, especially, grain, hay, fertilizer and seed, in large quantities at a saving. All farmers of the county are invited to be members. During the past year the Association has done a business of over \$200,000 and it is growing rapidly. Local branches are definitely organized in 10 communities of the county. This Association has vast opportunities if properly supported. It needs and deserves the backing of every farmer in the county.

III. DAIRY FARM MANAGEMENT.

A. Marketing Milk:—In southern Essex County the milk market was demoralized with no standard price. The farmers in several towns have gotten together, N. E. M. P. A. locals have been organized, a market committee representing the locals, has been chosen, a standard price for milk has been made and conditions are greatly improved.

B. Stock Improvement:—Assistance has been given to several farmers in securing pure bred bulls and cows to improve their herds and two cars of excellent grade cows were obtained from Maine.

C. Milk Record Sheets:—A number of farmers are now weighing the milk from each cow in their herd, daily, and know which are the loafers. We are glad to furnish sheets to persons desiring to start in weighing their milk.

D. Farm Accounts:—About 70 farmers have secured copies of the Massachusetts Farm Account Book and know where they stand at the end of the year. The County Agent will gladly assist any one in starting and closing farm accounts.

IV. FRUIT GROWING.

A. Orchard Team Work:—At Amesbury a group of farmers got together and worked with the County Agent on several different farms in pruning apple trees. Ideas on pruning were exchanged, a good number of trees were trimmed and those who took part seemed well pleased with results.

B. Orchard Planting:—Assistance was given to several farmers in plan-

ning, laying out and setting young orchards.

V. FIELD CROPS.

A. Potato Tests:—The Green Mountain and Russet type of potatoes were compared on 10 different farms. The Russet type did not make as heavy a growth of vine, in some cases did not blight as quickly or rot as badly, but in most cases yielded less than the Green Mountains. On some plots the Russet blighted and rotted a badly as the Green Mountains. Had the season been drier, results would doubtless have been different. Similar tests will be repeated next year to gain further knowledge. In the tests of northern grown seed as compared to homegrown seed the increase in yield from northern grown seed averaged about 90 bushels per acre.

B. Corn Variety Tests:—In the silage corn variety tests, the Williams, Yellow Dent, proved particularly early maturing, and leafy. The Early Lakeside is a promising sort. In the crib corn tests the Moulton corn, R. I. White Cap, Stickney and Davis did very well.

C. Hay Plots:—The top dressing demonstrations showed that on a good soil, not too full of manure, an application of 150 lbs. of nitrate of soda and 200 lbs. of acid phosphate per acre will grow hay at a cost of about \$5 per ton.

D. Acid Phosphate:—Several farmers used acid phosphate with manure on corn, tomatoes and other crops, and found it to give better results at a less cost than a low grade ready mixed fertilizer. The use of acid phosphate with manure for corn and other field crops should become a more common practice.

VI. MARKETING.

An attempt was made by the market gardeners of Essex and Middlesex Counties to form a Cooperative Selling Exchange, but owing to the lack of volume of business promised the project was given up for the present. The Lynn and Haverhill public markets have continued to do a thriving business and seem to fill a need by bringing the small and medium sized farmer in direct contact with the consumer. A well arranged State Bureau of Markets could be of great service to our county. It could be especially helpful at times of gluts by carrying on advertising campaigns to bring these facts to the attention of the consumer and stimulate consumption.

VII. MISCELLANEOUS.

The Puritan Farm Loan Association of Haverhill and Lynn has been

organized and is doing creditable work. A Farm Bureau Tour covering several of our best farms and demonstrations was enjoyed by 200 people in 50 autos. The Essex Farmer and Homemaker is published monthly and keeps about 1400 people in touch with the latest agricultural and homemaking news of the county. About 2000 Rust Proof Asparagus plants have been distributed to farmers of the county. A successful Tractor School and demonstration was held last spring. The Essex County corn show held in connection with the Annual Farmers' Day was attended by about 1000 people and pronounced the best corn show held in Massachusetts last year. The germination contest was especially noteworthy. A Two-day Extension School at West Newbury was well attended. The County Sheep Day at Hathorne, proved to be of much value. Fair exhibits along agricultural lines were made at several Fairs in the county. Assistance was given in judging exhibits and at Topsfield a Junior Stock Judging Contest was held. A demonstration on hog feeding with self feeder and pasture showed that feed costs were high and labor costs low. We hope to get further information along this line the coming year. Miscellaneous farm visits, meetings and office work consumed the remainder of the Agent's time.

Conclusion:—In carrying out the work able assistance has been received from Specialists from the State College at Amherst, Instructors of the Essex County Agricultural School, Farm Bureau officers, the State Department of Agriculture, and farmers in general. With the splendid attitude which farmers over the county are showing toward Farm Bureau work we cannot but feel that a great future is before us.

ANNUAL REPORT OF HOME DEMONSTRATION AGENT.

Five main projects were carried out in the county the past year:—Food, clothing, hygiene, household management, and millinery. Each project had several subdivisions which enabled groups to concentrate on any phase of the work which appealed particularly to their interests or needs.

1. Food—It's Right Use.

- a. Food selection.
- b. Preservation.
- c. School lunch.

Several groups have had a series of six or more lessons on food selection. Women feel they want to know that they are feeding their families to make them individually most efficient

for the kind of work each has to do. Too much emphasis can not be put on this part of a homemaker's job, to see that children have foods which make them grow, that adults have foods which repair waste and makes the brain clear.

Preservation of foods has been carried on in 26 towns in the county. Group and individual instruction was given through the summer months. Over 100 home visits were made in connection with this part of the project.

There is more general interest in the School Lunch this year than last. Six places are now serving a hot dish with the cold lunch brought by the child which were not doing so last year. We hope before long every school in the county where children have to stay through the noon hour will establish this method of protection for their children's health.

II. Hygiene.

Health Instruction.

Food for Young Children.

Lectures and illustrated talks have been given on health hygiene, with demonstrations of child care. Some groups have been and are taking work on food for children under school age.

III. Clothing.

This work is proving of great value to the women as it is giving them confidence, efficiency in this work, and better health standards, as the slogan is a "Better Body to Cloth." The clothing groups were started in two towns in the county last spring, Ipswich and Andover. From the original groups it has spread to three or four other groups in each town. A great many individuals have been taught or assisted with some part of the course, and today there are 15 new groups ready to take the first course, and the groups in Andover and Ipswich are taking the advanced work.

IV. Household Management.

Equipment.

Homemade.

Commercial.

Kitchen Arrangement.

Account Keeping.

The homemade equipment models have been travelling almost continually the past year and we know many have made practical use of them. 119 fireless cookers and 76 iceless refrigerators were reported in use in the county as a direct result of demonstrations or exhibits. There are doubtless many others which have been made through interest aroused in this manner but not reported.

Commercial equipment, such as washing machines, ironers, fireless

cookers, etc. are becoming more popular as possibilities of help in the housework grow scarcer. Women who have bought such equipment claim a saving in time, labor and money for the home. It is worth looking into.

Kitchen Arrangement.

Some women are saving themselves fatigue and time by rearranging their kitchens to route their work as the tasks are naturally accomplished. This often means no expense, only a little thought. Meals though should be prepared with the idea in mind to save steps. From storage space, preparation table, cooking surfaces, serving space, dining room food goes in order about the kitchen until it arrives in the dining room with no time or steps wasted in useless crossing and criss-crossing the kitchen. Then the height of these same working surfaces spell comfort or backache as the case may be. Why double over a sink year after year which is from 3 to 8 inches too low?

Account Keeping.

A demonstration group from 50 to 75 people in Andover are working on this project. A series of 10 talks or demonstrations being given to teach economical methods, and the women are using the account books published by the State College. At the end of the series the women will be ready to make a budget by which to plan their living the following year. Over 150 account books are being used by women in the county.

Millinery.

Twenty-one groups of women have taken advantage of the opportunity to learn how to make their own hats. These women find they can make hats which they are proud to wear, and which also give them satisfactory results when price is concerned, for these women have saved over \$2000 on millinery alone this year.

ANNUAL REPORT OF COUNTY ORGANIZING AGENT.

The first step in the organization of club work in all projects is to interest the boys and girls in the various sections of the county. This is brought about by securing the cooperation of the superintendents of schools, principals of schools and school teachers of all sections. Three to four weeks before each contest is due to start the County Leader invites the State Leader and the Local Leader to visit the schools and talk to the boys and girls in the interest of that particular club project. The boys and girls who show their desire to join are then given an

(Continued On Page 6.)

WITH THE FARM BUREAU

SCRUB BULL DOOMED.

The death knell of the scrub bull in Essex County was sounded at the Annual Farm Bureau meeting at Hathorne, December 3d, when the report of the committee on the Pure Bred Bull Campaign was read and accepted enthusiastically by the 300 farmers present. Farmers all over the county have committed themselves to work hard to eliminate the wasteful pest, the scrub bull, and systematically too. The county committee, Messrs. L. G. Dodge of West Newbury, George Averill, of Andover, and Dr. J. B. McDonald of Hathorne, are to have charge of the campaign, assisted by the County Agent. They are to appoint local committees in each town who will assist in getting a list of scrub bulls and pure bred bulls of merit in each town, and also a list of good bulls for sale. A record of replacements will be made and emblems issued by the U. S. Department of Agriculture, to every farmer who agrees to use nothing but pure bred sires on his farm. Much interest is being shown in the campaign and several farmers have already made arrangements to change their sires. It is expected that the results of this movement will mean much to the development of the dairy industry in Essex County. For information in regard to securing sires of merit, write the County Agricultural Agent, Hathorne, Mass.

FARMERS GET COWS FROM MAINE.

During the past month the County Agent has assisted in selecting two carloads of high grade dairy cows from the vicinity of Auburn, Maine. This project is a part of the movement to improve the quality of our dairy cattle. Farmers from different sections of the county had asked the Agent to assist in securing good cows and when enough requests had been received for a carload the trip was made. Dr. J. A. Ness, the noted Ayrshire breeder of Auburn, Maine, assisted in securing the cows, and the business end of the deal was handled by the Essex County Cooperative Farming Association. Up to date the cows have proved to be very satisfactory.

Varied Gifts.

Some women are remarkable for their poise; others for their avoidupols.

SUGGESTIONS FOR THE LUNCH BOX.

Present conditions necessitate much thought and interest on the part of the homemaker who puts up lunches for the worker or for school children.

The lunch box should be one adapted to carry both solid and liquid food. It should be packed to look appetizing when opened, and if possible the food should include those that furnish the body power to work and keep it warm—cereal, bread, sugar and fats; those that repair the worn parts of the body—eggs, milk, nuts, cheese, beans, meat and fish; those foods that keep the machinery of the body working smoothly—fruit and vegetables. If these foods and their purpose are kept in mind when packing the lunch, it will help largely to keep the one who eats it well and strong.

The thermos bottle will not only hold a hot drink, but may also be used to hold soup or hot vegetables.

Sandwiches often form the main part of the lunch.

The bread should be cut evenly.

The thickness of the slice should depend on the vigor and appetite of the consumer.

Whether thin or thick slices of bread are to be used is not so important to the palatability of the sandwiches as are the quantities in which the butter and the filling are used.

Butter should be softened by creaming it with spoon or knife, and should be spread evenly over the entire surface of the bread.

The thickness of layers of butter and filling should depend on the thickness of the bread.

Both slices of bread should be buttered, since butter keeps the bread moist and prevents the filling from soaking into the bread and thus making the sandwich wet and unappetizing.

A sandwich should be wrapped in waxed paper in order to prevent its drying out and to prevent the absorption of flavor from other parts of the luncheon.

Liquid foods such as preserves, sauces, and the like, should be put in small, clean, sealed containers.

Materials essential to good packing should be kept on hand, such as:—Waxed paper, paper napkins, paper wrapper, bag, box, basket or pail. Thermos bottle—if it is not possible for the consumer to obtain a hot dish with the cold lunch where lunch is taken.

Foods should be wrapped in wax

paper before being placed in the box.

The neatly wrapped articles should be placed, so far as possible, in the order in which the food will be eaten.

Articles should be packed snugly to reduce the size of the package and to prevent the food from shaking.

Typical lunches for school children or for persons not exercising actively:

I.

Bacon Sandwiches, Apples, raw or cooked, Marmalade, Molasses cookies, a few nuts or a piece of candy.

II.

Egg Sandwiches, Oranges, Jam Sandwiches, Plain Cake, Two or three Figs.

III.

Stuffed Eggs, Plain Sauce, Bread and Butter, Sugar Cookies, Two or three dates.

IV.

Meat-paste Sandwiches, Prunes, Potato and Onion Salad, Sponge Cake, Milk to drink.

Typical lunches for those whose work requires active physical exertion:

I.

Baked Beans, Apples, Brown-Bread Sandwiches, Cookies, Pickles.

II.

Cold Meat, Pickles, Peach Sauce, Bread and Butter, Ginger Bread.

III.

Egg Sandwiches, Oranges or other fruit, Jam, Pudding, Tarts or Pie, Nuts or a piece of cheese.

ALUMNI MEETING.

(Continued from page 1)

with the Trustees and Directors in properly preparing and erecting memorials or markers to our service men. After the business meeting, the Alumni Association adjourned to the banquet hall and there enjoyed a fine banquet served by Schleuber of Lynn. This took the particular form of a welcome to service men. The members were entertained with after dinner speaking by some of the service men.

Later all returned to the Agricultural Hall where a reception and dance were enjoyed by Alumni, Trustees, Faculty and Senior class. Every one voted this to be one of the big red letter days of the school. The enthusiasm and loyalty for "Essex Aggie" ran very high. Truly one of the greatest assets to a growing school is a live, virile Alumni Association.

ANNUAL REPORT OF COUNTY ORGANIZING AGENT.

(Continued from page 4)

enrollment card to sign. Following the enrollment, the boys and girls of each school are organized into a local club, having the necessary officers, etc., and the club begins on a permanent program of work. Meetings in each project are held every two or four weeks, and during the contest State Agents are invited to attend and talk on the subjects arranged.

Boys or girls who wish to join and fill all the club requirements must do five things:—First, enroll; second, do the work planned for that project; third, keep a report; fourth, write a story of experiences in club work; fifth, exhibit when required.

During the contest year the Local, County and State Leaders visit the members at their homes to help them in their projects. Picnics and Field Days are held during the year to keep the members interested. Exhibits are held so that they can show the public their products and also complete for prizes.

This last year Essex County boys and girls carried on seven projects, with enrollments as follows:—Yeally Poultry, 116; Home Economics, 193; Spring 6-months Poultry, 140; Pig, 248; Calf, 8; Canning, 209; Garden, 205.

One of the important and interesting features of the 1918 club work was in the exhibition of members' products, within the county, and at both the New England Fair and the Eastern States Exposition. The biggest display of club products in the county was on County Farmers' Day last March. Products that were on display came from all sections of the county, from sewing, breadmaking, garden, canning and poultry club members. This display appeared to be of much interest to all and helped to stir up interest in the coming projects.

Miss Madeline Walker of Beverly, one of the exhibiting members, stands the highest in number of loaves of bread made in the 4-months, and also in the number of hours spent in household tasks. Miss Walker made 7 loaves of bread every other day during the 4-months contest, or in other words kept the family of 11 supplied with bread.

At the Eastern States Exposition 38 Essex County members exhibited, and though counties from 11 states were competing, Essex County won for Massachusetts the following prizes:

First prize, Best Cucumbers, Harold Rogers, Haverhill; fourth prize, Best

R. I. Pullet, John Narkum, Danvers; first prize, Best Light Brahma Pullet, Maurice Claridge, Haverhill; second prize, Best Light Brahma Cockerel, Maurice Claridge, Haverhill; first prize, Best Dozen Brown Eggs, Hugh Parkhurst, Gloucester; second prize, Best Dozen Brown Eggs, Austin Lewis, Ward Hill; first prize, Best Poultry Judging, Hugh Parkhurst, Gloucester.

During May three Pig Squeals were held in Lynn, Haverhill and Methuen. The 200 prizes distributed at these squeals were bought within the county and were of the best. The Haverhill Trust Company, handled the Haverhill lot similar to last year, on 6-months notes. The prompt payment of members last year led to the company's willingness to handle the proposition. This year the Pig Club members raised 43,400 lbs. of pork valued at \$7,000.

During the summer's work club picnics were held to keep up club interests and give boys and girls an enjoyable time. The biggest Joy Day of the year was the County Boys' and Girls Field Day. The day's program was educational, competition and recreational and the success of the day has made the County Field Day a permanent affair.

Considerable time was spent by the County Leader in carrying on individual home visits on all projects in all sections. These helped a great deal in bringing about the vna success of the several projects.

At the monthly club meetings stereopticon lectures and moving pictures were given by State Leaders, Messrs. Howe, Dean and Rice. These lectures and pictures helped to make interesting programs.

The following figures will give some idea of the volume of club work done during the year 1919:

Enrollment—all clubs	1101
Clubs organized	68
Meetings held	309
Present at all meetings.....	6543
Number of demonstrations given	109
Number of personal visits.....	1316
Circular County letters	6409
Circular State letters	4630
Personal letters	829
Office calls	168
Telephone calls	153

Value of products grown, or made by club members \$31,025.00

Club work teaches the boy or girl to spend his or her spare time in a profitable way. It teaches the one who joins, the value and responsibility of handling money, and to take some responsibility in helping the fathers and mothers in the homes. Besides these benefits it teaches those

SCHOOL NOTES.

The Football Banquet, given by the students of the School to members of the team, was held on Friday evening, December 12. Retiring Captain Osborne, in behalf of his teammates, presented Coach Hathaway a gold chain in appreciation of his work with the boys this Fall. Captain elect Moreland spoke on the outlook for next year and predicted another successful team for 1920.

The senior class has organized a Forum Club, the purpose of which is to advance the literary interests of the members. The following officers have been chosen to serve until January 1. President, L. B. Ives; Vice-President, Roy Osborne; Secretary, Maynard Tucker.

At the assembly on Wednesday, December 10th, a poultry demonstration was given by the following members of the School Poultry Judging teams:— James Rogers, of Lynn; Philip Lee, of Beverly; Wallace Moreland, of Salem.

ANNUAL FARM BUREAU MEETING.

(Continued from page 1)

Field Crops, Mr. Carver on the Poultry, and Mr. Dodge on Livestock.

The Agricultural School Boys' and Girls' Glee Club rendered two very pleasing selections.

A list of local Farm Bureau Committeemen was submitted, and Mr. Willard's excellent talk finished a well rounded program.

A feature of the program was a demonstration on selection of the "Herd Sire" by Prof. Cooley of M. A. C. A splendid Holstein bull furnished by Mr. I. H. Sawyer of Topsfield, added greatly to the value of the demonstration.

ANNUAL REPORT AND CATALOG

Before this copy of the Farmer reaches you, the annual report and catalog will be delivered from the press. The booklet will contain lists of the organization of the School, together with various reports and the usual material which makes up a catalog of a school. The book will be well illustrated with full page pictures and diagrams and also small cuts in the text.

If you do not receive a copy in a reasonable length of time, a simple letter or card reminder will cause a copy to be mailed you.

who join, something about agriculture and to respect agriculture, but the real reason why Uncle Sam is carrying on the work is to make BETTER BOYS AND GIRLS.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 2

HATHORNE, MASS., FEBRUARY, 1920.

No. 2

POULTRY.

A Practical Plan for Breeding.

Theories on inheritance of fecundity are of little interest to practical poultrymen unless they can be realized in eggs. In this article we shall not discuss theories nor the experimental evidence upon which they are based, but will proceed to state the best known practices aiming to increase production.

First, constitutional vigor and good health are fundamental, and always the first basis of selection.

Second, the first season's effort should be to mate up a few pens of selected females with the best males available and toe-mark the chickens, so that their sire will be known. Allow a few cockerels, the fastest growing ones from each mating, to mature.

Third, note the next fall and winter the pullets which mature earliest and lay best. Save their sire and brothers (sons of the same sire) for use in breeding the following spring, and dispose of the other lots of cockerels.

Fourth, the next season mate the best of these cockerels to selected high producing hens and pedigree the chicks. When resulting pullets' winter records are available, group them together by dams.

Fifth, when the best families are thus determined, select from them the breeding males and proceed in this way each year to test matings from which cockerels are to be used by the performance of the female progeny.

Poultry Printers.

1. Poultry Service Bureau is glad to furnish the names and addresses of poultrymen who have day-old chicks, hatching eggs and breeding stock for sale, to anyone in the county who wishes to purchase such stock. We have a trained Specialist who will be glad to lend his services in helping you solve your poultry problems, such as diseases, feeding, construction, planning poultry plants, etc. Call Danvers 230 for poultry assistance. We are at your service.

2. Mate Your Breeding Pens Now. Don't breed from all your hens. Select the best and mate them with a vigorous rugged cockerel of good type. Small matings early in the



ESSEX CO. FARMERS CAN COOPERATE.
A Group of Farmers Unloading a Car of Grain at Greveland; Purchased Cooperatively.

season give better results; one male to 10 females is plenty for February hatchings.

3. Feeding Breeders. Feed regular scratch grain. Use the following dry mash: 200 lbs. bran, 100 lbs. corn meal, 100 lbs. middlings, 50 lbs. beef scraps and 50 lbs. bone meal. Feed plenty of green food in the form of sprouted oats or cabbages.

4. Collect Hatching Eggs Often. It is important that your hatching eggs are not chilled; make it a rule to gather them every couple of hours during February and March to get the best results.

5. Keep the Litter Dry. Many hen houses in the county have wet litter at this time of year. It is important that this be replaced with six to eight inches of deep straw, and the house so ventilated that the litter will remain dry. If you want to increase your egg production, try cleaning the wet litter out of your hen house and replacing it with clean, dry straw.

FARM MACHINERY.

The time to overhaul the machinery and equipment is at hand. Look over all the tools to be used this coming season. Temporary repairs made last season should be made permanent. See that all bolts and nuts are oiled and properly set up. Give all bearings and moving parts a little oil, and see that they work properly.

Parts can be obtained much more readily now than during the spring months. The manufacturers and dealers are not rushed at this time, so they can make and ship these parts more promptly.

How much time would be lost during the plowing season, if a point should become broken and your dealer could not supply you from his stock? Remember that there are many men who do not buy parts until one is actually broken. The time for these parts to break is when they are used the most, or, in the case of the plow, during the spring season. This causes a heavy demand on the stock of the dealer and it is soon exhausted. Then it becomes necessary to send to the manufacturer. He usually makes enough to meet the normal demand and practically all of the plow points are shipped to the various dealers in advance of the spring season. During the spring, the manufacturer is making implements for the summer and fall seasons, thus, when a delayed order reaches him for a plow point, he is not prepared to handle it as promptly as at this time.

If there are parts of a machine which are very apt to break or to become disabled, have extra parts on hand. Two dollars in parts now may save ten or twenty dollars in cash and labor during the spring.

ESSEX FARMER and HOMEMAKER

HATHORNE, MASS.

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Miss M. P. Crawford, Homemaking Department.

Olaf A. Olsson, Alumni Editor.

Gladys E. Stratton, Home Demonstration Agent.

CALENDAR OF EVENTS.

Feb. 6—Minstrel show and dance at school.

Feb. 10—Essex County Branch of N. E. M. P. A. meets at school.

Feb. 12—Women's Advisory Council of Essex County Agricultural School at Hathorne.

March 10—Seventh Essex County Farmers' Day—Special features.

Statement of ownership, management, etc., of the ESSEX FARMER AND HOMEMAKER, published at Hathorne, Mass., required by act of Aug. 24, 1912. Editor, Fred A. Smith, Hathorne, Mass., Publishers, Trustees of the Essex County Agricultural School, Hathorne, Mass. Owners, Citizens of Essex county, Mass. Known bondholders, mortgages and other security holders, holding one per cent. or more of total amount of bonds, mortgages or other securities, none. No advertising revenue. Signed, Fred A. Smith, Hathorne, Mass.

Sworn and subscribed before me, this 17th day of January, 1920.

ANDREW NICHOLS,
(Seal) Notary Public.

FARMERS' DAY.

March 10, 1920.

For the seventh time Essex County Farmers' Day will be held at the Agricultural School on the above date.

Plans are being rapidly formed with an attempt to make this one of the best farmers' and homemakers' events ever held in this county. In addition to the regular speaking program, in

which speakers of especial general interest will be heard, there will be section meetings devoted to the various special lines of agriculture which need emphasis.

An effort will be made to repeat the corn show which was so successful last year. Prizes will be awarded to the successful competitor. It is hoped that the corn show will be even more valuable this year, than last.

Special emphasis will be again placed on the germination test of seed corn.

There will be a trade display, and also an educational display.

See next number for full details.

ALUMNI NOTES.

Few schools in Essex county can boast of the war record established by its students as the Essex County Agricultural school. Its students were to be found in every branch of the service, both here and in France. Four of them made the supreme sacrifice, and it is expected that within a short time, four fitting memorials to their memory will be found at the school.

It is hoped that in the near future enough space will be afforded the editor of the Alumni column, in this paper, to give a complete record of each student who had a part in the World War.

Wendall F. Oliver, class of '16, returned from France last week, after having served 11 months with the Friends' Reconstruction Unit. His work in the devastated war areas of France was full of interest and worth while. At one time the sum of \$8000 was spent for the purchase of 24,000 fruit trees, which were distributed, five trees being given to each family in the Argonne section.

Before the war he was employed by the William F. Moon Co. of Morrisville, Penn., with whom he will again take up his work in a short time, and will be employed in the sales department.

His brother Theodore Oliver, class of '17, is at the present time in France doing agricultural reconstruction work with the Friend's Unit, and it is expected that he will be home the latter part of the summer.

We are pleased to note the engagement of Miss Margaret Wood, class of '16, of the Home Making department, to Kenneth Luther of Warren, Mass. The recent marriage of Miss Mariam Illingsworth, class of '16, to Fred Robinson of Marblehead, took place at the home of the bride, December 27.

Miss Lucinda Bousley is now a

ACTIVITIES OF THE BOYS' AND GIRLS' CLUBS.

At the Boston Poultry Show held in Mechanics' building, Dec. 30 to Jan. 3, Essex County Boys' and Girls' Poultry Clubs were represented by a demonstration team consisting of students Wallace Moreland, Philip Lee and James Rogers. Because several counties of Massachusetts and Connecticut were represented, the competition was strong. This, however, did not trouble our team, as they were placed among the winners for their creditable showing. This was very encouraging, as it was their first appearance before the public in work of this kind.

On Jan. 22nd the team repeated this demonstration by request, with additional features at the union meeting of Massachusetts Agricultural organizations held at Horticultural hall, Boston. Because of the instructive and interesting manner in which this demonstration was given, it brought many favorable comments, and much credit is due the boys for their efforts.

The Poultry Judging Team, consisting of Club Members Hugh Parkhurst, Ernest Walsh and Gerald Knightly, who are first year students at Essex County Agricultural School, received second highest score on points for most efficient judging, according to the Standard of Perfection. This team was only a very few points below the winners, and is to be commended for their excellent work, as the competition was very keen. Massachusetts, Connecticut and Rhode Island, being represented by many well-trained and experienced teams. Hugh Parkhurst also has the honor of winning second place for the best individual poultry judging work, this is very gratifying, as this young man was in competition with 40 other club members.

registered nurse, and is located at the Salem hospital, where she is at the present time supervisor of the operating room. Miss Bousley is another graduate of our school, who is doing excellent work. She will attend Simmons college this summer, taking a special course in public health.

O. A. OLSSON,
Alumni Editor.

MINSTREL SHOW

The minstrel show and dance of the Athletic Association will be held on Friday, Feb. 6, at 8 P. M.

POTATO STUDIES

COMPARISONS AND CHARISTICS OF VARIETIES

Mr. Samuel Knowles Contributes Valuable Notes.

The Agricultural conference of the State Board of Education held at Amherst in the summer of 1918, revealed two facts about potatoes. First: Much mixed seed. Second, some seed purchased and planted not true to name. These facts suggested to the writer the growing of several varieties of potatoes for the observation of distinguishing characteristics of growth. The writer was aware that in securing seed he also might buy seed mixed and not true to name. Eight varieties were chosen. The seed of two varieties were home grown, and the surprise is that of the other six varieties only one was mixed. On the true-to-name question, the writer requests that potato experts who may read this report, write him if any of the eight varieties of potatoes herein described appear to be "Not True to Name."

The varieties described are: 1, Todd's Wonders; 2, Green Mountains; 3, Sir Walter Raleigh; 4, Irish Cobblers; 5, Aroostook Pride; 6, Early Rose; 7, Carmen No. 3; 8, Eureka.

Seed sources as follows: 1 and 2, home grown; 3 and 8, came from Philadelphia, Pa.; 4, 5, 6 and 7, came from Providence, R. I., and were said to be Maine grown.

Condition of ground and season, poor; unable to plant until June 2, and ground too wet then; continuous heavy rains after the middle of July kept soil very wet; too much water and too little air in the ground checked the growth of tubers already formed and killed many which were just forming.

The land was 115 feet long, 28 feet wide, allowing $3\frac{1}{2}$ feet between each of the eight rows. The lot has a gradual slope to the northeast corner, and a streak of gravel ran diagonally across it. All of the varieties produced the poorest potatoes in the gravelly soil. Potatoes were grown on the same land for two preceding years.

Two hundred pounds of "Maine Potato Special" fertilizer were used, 1918 brand. One hundred pounds were worked in the rows before planting and 100 pounds scattered broadcast between the rows and cultivated in.

Excepting one variety, Todd's Wonders, one-half peck of seed was secured and cut before planting. Much of the seed was heavily sprouted; the sprouts were not broken off, but cut back. The seed varied in planting

capacity. Irish Cobblers and Aroostook Pride each planted 105 lineal feet, while Green Mountains, Sir Walter Raleigh and Early Rose would have planted 130 lineal feet each, if the rows had permitted. The seed of all the varieties broke ground very evenly. Observations for distinguishing characteristics of growth were made all through the growing season. The differences were easily distinguished until growth was complete, when the leaves particularly, began to merge into the darker color of late summer. The stems retained their distinguishing features as long as life was in them.

All the seed was planted nine inches deep, the trenches only partially filled, and the balance of the earth cultivated in as the plants grew; the final cultivation rounded the rows slightly. All work except plowing and furrowing was done with hand tools. The crop was cultivated four times.

Three sprayings were made with arsenate of lead for bugs, and one spraying early in August with Bordeaux Mixture for blight. Very little blight appeared.

The vines died down in the following order: Irish Cobblers died quickly after the middle of August; Eureka followed; Aroostook Pride next; Carmen No. 3, Sir Walter Raleigh and Early Rose matured together; the Green Mountains, which made the poorest growth of vine, died down next, and stems of Todd's Wonders were green when dug on Sept. 26.

Length of stolons and habits of stolon growth, should determine the depth at which seed should be planted. When stolons grow downward, shallow planting will do. When stolons tend upward, as in the Early Rose, deep planting should be practiced, but the compressibility of the earth has much to do with the depth at which potatoes will best grow. When the stolons are about to sprout, the earth should be cultivated to the depth of, or deeper than, the seed, otherwise the hard ground underneath will force the stolons and potatoes upward. This is the most frequent cause of potatoes protruding out of the earth. If potatoes are killed, the rows should be two feet wide at the top, so the stolons and roots can spread out.

Dead Embryos.

When digging the later varieties, many small stolons from half an inch

to one inch long, with embryo potatoes, as big as peas, were found dead, nothing left but the brown skin of stolon and embryo. This suggests that the excessive rain of late July and early August killed these tender shoots, and accounts for the poor crops, only the potatoes forming early in the season survived. Whether it was the water alone, or the exclusion of air, as well as the excessive moisture, which caused these embryo potatoes to die, remains to be solved. Most of these dead embryos were near the base of the root stem. Only a few plants of three varieties blossomed this year. Buds formed but died and dropped. This happened all through this section of the State.

TODD'S WONDERS.

Stems strong and purple in color from ground to tips. Growth upright, standing erect all through the season. Very few branches. Leaf medium to dark green. Blossoms lavender in color. Many stems green when dug Sept. 26. This potato in 1918 resisted blight when intersecting rows of Green Mountains blighted and died down early in August.

Tubers medium to large, white, shape long, yet different to and thicker in body than Green Mountains. Two rotten ones. Few small ones and all of them usable. Stolons short, and all of them located near bottom of the root stem and below the feeding roots, growing out and down. Where the earth was soft, tubers were often three inches below the bottom of the root stem. This habit of growth would suggest shallow planting in compressible soil. For frequently the tubers were 10 to 12 inches deep. Flat cultivation is suggested that feeding roots may spread over a wide area.

Seed planted: 4 lbs. Total number produced: 270. Total weight: 78 lbs. Average product per pound of seed: $19\frac{1}{2}$ lbs, or 234 bushels to the acre, planting 12 bushels of seed to the acre. Dug September 26.

Few small. None unusable. Two rotten. Many embryos no bigger than peas were found dead, only the brown skin of stolon and embryo being found.

GREEN MOUNTAINS.

Stems very strong, branching heavily and causing the plants to lie down and spread over a wide area of ground. Leaf large, light green in color, with stems a lighter shade of green. Blossoms white.

Stolons vary in length and are distributed from near the base of the root stem to near the surface of

the ground. The largest potatoes usually on the longest stolons; tubers medium to large. Shape oblong with flat sides. Large ones like a brick with the corners rounded. Eyes very small and well distributed over the body of the potato, with good spaces between them, one potato often making eight to twelve sets. Skin white and smooth. The best shaped and most attractive of all the eight varieties grown, but most subject to blight and rot. Deep planting suggested, as tubers are disposed to work toward the surface of the ground. Seed planted, 6 lbs. Total number produced, 398. Rotten, 92. Small, 46. Rotten and small ones weighed 22½ lbs.; sound and salable, 63¾ lbs. Total weight, 87 lbs. Product, 1¼ lbs. to 1 lb. of seed, or 171 bushels to the acre, planting 12 bushels of seed to the acre. Dug Sept. 26.

This is the poorest yield I have ever had from Green Mountains, and may be accounted for because the seed was home grown for four preceding years, and the Green Mountains seemed to be most affected by excessive moisture.

SIR WALTER RALEIGH.

Upright growth. Branches moderate in number, but more than Todd's Wonders. Stems first green, then they take on color, and are speckled, but are a much lighter shade of purple than Todd's. The plants did not blossom this year. Leaf dark green, but lighter in color than either Irish Cobblers or Todd's Wonders. Stolons short and distributed up the root stem, but not near the surface of the ground. Tubers well grouped because of the shortness of the stolons. Potatoes medium to large. In shape, shorter than Green Mountains and very broad. Color white and eyes moderately deep. Seed was badly mixed, and after eliminating plants not true to name, the estimate on seed planted is 4½ lbs. Total number produced, 438. Small, 116. Rotten, 8. Small and rotten weighed 9 lbs. Salable ones, 322, weighed 80 lbs. Total weight, 89 lbs. Average product per pound of seed, 19.7-8 lbs. or 237 2-6 bushels per acre, planting 12 bushels of seed to the acre.

IRISH COBBLERS.

Stems strong, stand up well and are colored two-thirds of way up from the ground. Branches more than Todd's and Sir Watler Raleigh, but much less than Green Mountains and spread well on top, resembling a triangle with one point on the ground. Only three plants blossomed and they were all white. Query: Does the Cobbler sometimes throw a white

blossom? Leaf rather round, thick and very dark in color. Every characteristic above ground indicated Cobblers from pure seed, and the tubers are Cobblers in shape.

Stolons short and potatoes grouped together close to the root stem, a short distance above the seed. Easy to dig because they occupy a small space in the ground. Color white, shape roundish, eyes rather deep.

Seed planted, 7½ lbs. Total number produced, 575. Small ones, 152. Rotten ones, 6. Small and rotten ones weighed 11 lbs. Good ones numbered 417 and weighed 93 lbs. Total weight 104 lbs. Average product per pound of seed 13 13-15 lbs. or 166 2-3 bushels per acre, planting 12 bushels of seed to the acre.

AROOSTOOK PRIDE.

Moderately strong stem of high growth, colored about one-third up from the ground, then green to the top. Resembles Green Mountains in habits of growth, but stems and branches not as heavy. Leaf rather dark in color.

Seed did not cut well and more would be needed to cover an equal area than any other of the eight varieties except the Irish Cobblers. One-half peck of each of these varieties planted 105 lineal feet. Tubers long and round. Many of them irregular in shape. Color white. Size medium to small. While the Agricultural conference was at Segregansett this summer, Aroostook Pride, similar to the above description, were dug, but one person declared that Aroostook Pride is a pink colored potato. If so, then both Segregansett and myself had seed not true to name. Will someone acquainted with this variety please write me definite information on color and shape of Aroostook Pride? This potato grows very deep in the ground, and in many instances the stolons penetrated deeper than the set. In light soil shallow planting may be all right for this variety.

Seed planted, 7½ lbs. Total number produced, 638. Small ones, 218. Rotten ones, 8; weighing 15 lbs. Good tubers, 420; weighing 96 lbs. Total weight, 111 lbs. Average for each pound of seed, 14.4-5 lbs. or, 177 3-5 bushels per acre, planting 12 bushels of seed to the acre.

EARLY ROSE.

Stems very strong and slightly colored two-thirds up. Branching, spreading habit. Covers more ground than any other variety planted. Blossoms white. Color of leaves medium green. Stolons of varied length, growing high up on the root stem, the tubers being nearer the

surface of the ground than any other of the eight varieties, sometimes pushing their noses out of the earth. Long, roundish and rather irregular in shape, the nose end often tapering to a blunt round point. Color, pink with a much deeper tint on the nose end. Size, medium to large. Seed planted, 7½ lbs.. Total number produced, 681. Small and eight rotten ones, 92; weighing 3 lbs. Good tubers, 589 in number, weighing 117 lbs. Total weight, 120 lbs. Average per pound of seed, 16 lbs., or 192 bushels to the acre, planting 12 bushels of seed to the acre.

CARMEN NO. 3.

Strong, upright growth. Stems and leaves very dark in color, like Todd's Wonders, but stems not so strong. Branches more numerous and late in the season straggled over the ground. No blossoms this season. Stolons moderately long and even in length, grouped a short distance above the base of the root stem. When root with potatoes on it is held up, they hang in symmetrical bunch. Potatoes grew deep in the soil. Tubers russet in color. Size, medium to large. Shape longer than width and sides a little flattened. Eyes shallow. Seed planted, 7 lbs. Total number produced, 607. Small ones, 104; weight 8 lbs. Good potatoes 503, weighing 111 lbs. Total weight 119 lbs. Average production per pound of seed, 17 lbs., or 237 1-3 bushels per acre, planting 12 bushels of seed to the acre.

EUREKA.

A Southern potato, extra early. Stems and leaves a light green. Growth medium in height. Numerous branches forming a wide semi-circle from the ground on one side, over the top, to the ground on the other side. Appearance very even and attractive in the row. Did not blossom this season. Stolons very long and well distributed up the root stem from the very bottom to near the surface of the ground. Potatoes covered a wide area. Deep planting suggested. Size medium to small. Numbers very great. Color white. Shape roundish, with a few large specimens showing greater length in proportion to width. Skin smooth. Eyes shallow. Seed planted, 7½ lbs. Total number produced, 990. Small ones, 359, and 3 rotten ones, weighing 25 lbs. Good ones, usable but a few not salable, because of size, 628, weighing 108 lbs. Total weight, 133 lbs. Average production per pound of seed, 17.11-15 lbs. or 212 4-5 bushels to the acre, planting 12 bushels of seed to the acre.

(Continued on page 5)

WITH THE FARM BUREAU

SEED BUYING AND SEED TESTING

(By II. F. TOMPSON, M. A. C.)

Seed quality is a factor so difficult to determine, and so important to results, that no opportunity to insure quality should be omitted. Quality may mean the viability of the seed, which means its ability to grow, or it may mean those qualities which govern the type of the product after it is grown. The viability is easy to test, but that more important "type" is more difficult to learn about. Vegetable growers must depend largely upon the reliability of seedsmen in the purchase of seed. Seedsmen, in turn, depend upon the reliability of the men from whom they buy or the growers who grow for them or upon the inspectors who inspect for them. In some instances seed goes through the hands of several men. With the best of care, it is difficult to be sure of seed quality, when the seed comes through the hands of more than one wholesaler. As a rule, no effort is made to trace quality beyond the word of the seedsmen.

Wholesale seed production involves production on such a scale that quality as to type can rarely be better than a good average. Seed is grown in competition for a certain price per pound. This fact makes it easy to understand why fancy strains of seed should be high priced. They must be raised in comparatively small quantities under personal supervision of careful men.

Can we afford to use ordinary seed? One man has said to me, "I bought lettuce seed for \$1 per pound, and it is the best I ever had." Another said, "I paid \$5 per pound for special carrot seed, and the seed I bought for \$2 was far better." And these have been facts. But they do not prove that it is not worth while to get special quality seed. The proposition is, to get it and be sure of it.

Some facts are worth consideration at this point. In 1918 seeds of Danvers Yellow Globe Onions, Danvers Half Long Carrot, Hollow Crown Parsnip and Crosby's Egyptian Beet were grown at the Market Garden Field Station. The stock was carefully selected. The onions came from Mr. Richard Graves of Sunderland; the carrots from Durkee Brothers of Peabody; the parsnips from Henry Tipert of Danvers; the beets from Wyman Brothers of Arlington. In every instance the stock was selected and re-selected to type. A fair crop of seed was grown of each kind. In

1919, samples of this seed were sown side by side with samples of same varieties from seed purchased in the open market. The results showed more vigorous growth, a better stand and higher quality in every instance, except one. In every case of onions, one variety gave a greater yield than our own seed, but poorer market and keeping quality and the difference in yield was not sufficient to make up for the superior quality. We can say, without qualifications that this home grown seed was far superior to any other that came from general stock.

The best vegetable growers nearly always grow some of their own seed. It will pay, try it.

During 1919 the writer has had reason to note the value of a germination test as a business proposition. A cash loss of not less than \$300 occurred on a fall crop of spinach, because of a failure to determine the viability of the seed and consequently to know how thick to sow it. Talk this matter of a seed test over with your county agent. You can't afford not to.

FERTILIZER PRICES.

Although the reported reduction of 33 1-3% in fertilizer prices is not apparent as yet, there is some reduction on most all fertilizer materials. A 4-10-0 potato fertilizer is quoted at \$51.45 for March delivery, and 4-8-4 at \$60.75, 16% acid phosphate, is quoted at \$30.06 per ton. These prices are in 100-lb. bags, car lots delivered at your station. In mixed cars, f. o. b., Boston, 18 1/2% nitrate of soda is quoted at \$71.80 per ton, and 50% muriate of potash at \$153.12 per ton. For fruit trees, grass top-dressing and certain vegetables, it appears that a considerable saving can be made by purchase of chemicals. Where a good supply of manure is available, acid phosphate, with a little nitrate of soda will prove economical for corn and other field crops.

SHORTAGE OF CARS FOR LIME AND FERTILIZER.

The U. S. Railroad Administration report a probable car shortage during the spring of 1920 for the moving of lime and fertilizer, and urge early ordering and shipment in order to avoid disappointment and losses by late deliveries. We hope that the farmers of Essex county will take advantage of the saving by cooperative purchase of these materials in car lots, and order for shipment at once.

COURSE IN CLOTHING.

Clothing Work—Four groups of women have started the first course in clothing this month in North Saugus, Lynnhurst, West Peabody and Cliftondale. Mrs. E. K. Hayden is president of the Cliftondale group, and Mrs. Mabel Hart will act as secretary. Mrs. Willard Moses is president of the North Saugus group, Mrs. Thomas Baldwin, Jr., president of the Lynnhurst group, and Mrs. T. A. Martin, President, with Miss Marion Taylor, secretary, of the West Peabody group. A group will also begin in West Peabody the last of January. The other towns in which this work will start soon are North Andover, West Newbury, East Saugus, Topsfield, Saugus Centre and Andover. The group of women from West Andover who have been taking the first course under the instructions of Mrs. James Feeney of Andover, who is the local project leader, have nearly completed the first course.

The Advisory Council of the Farm Bureau and Homemaking School meets for the first time in 1920 on Thursday, February 12th, at 10.30 P. M., at the Essex County School.

Miss Laura Gifford, Assistant State Leader, has resigned her position at the Massachusetts Agricultural College, this month, to take up work in Hartford county, Conn. Miss Gifford has made many friends in connection with her work in Essex county, who will be very sorry to learn that she is leaving the work in this State, and will wish her every success in her new position.

POTATO STUDIES.

(Continued from page 4)

If one acre of each of the above eight varieties of potatoes had been planted, with similar results as above, from the standpoint of profit, they would be in the following order:

Name	Salable lbs.	Unsalable lbs.
Todd's Wonders....	14.040	None
Sir Walter Raleigh.....	12.880	1.440
Carmen No. 3.....	11.517	.822 6-7
Early Rose.....	11.232	.288 3-4
Eureka	10.848	2.400
Aroostook Pride....	9.216	1.440
Irish Cobblers.....	8.926	1.056
Green Mountains....	7.640	2.840

In ranking the Green Mountains, remember the seed was home grown for four preceding years, but it must be acknowledged that Green Mountains have rotted this wet season more than any other variety in this neighborhood.

SAMUEL KNOWLES,
Garden Supervisor,
Canton, Mass.

HENS MAKE RECORDS IN FIFTH CONTEST.

The thirty-four pens of high producing biddies that started November 1, 1919, in the Fifth Essex County Egg Laying and Breeding Contest are now making an excellent showing, and all indications point to a large number of 200 egg birds in this year's contest. The hens that make the high winter egg records usually lay over 200 eggs for the year, and so far in this contest we have forty good heavy winter layers. Hen No. 238 in Pen 32 has laid the largest number of eggs for the first 12 weeks of the contest, laying an even 52 eggs. She is a R. I. Red, owned by Applecrest Farm, Hampton Falls, N. H. There were three hens tied with 50 eggs apiece; No. 63, a White Leghorn in Pen 6; No. 93 in Pen 9; a White Wyandotte, and No. 147 in Pen 14, a White Plymouth Rock. There were over 40 hens that laid over 35 eggs each in this same period.

List of Contestants.

There are eight pens of White Leghorns, owned by J. F. Dubois, Lynn, (Pen 1 and 2); J. F. Crowley, Lynn, (Pen 3); F. M. Johnson, Waldoboro, Me., (Pen 4); F. J. Ward, Ipswich, (Pen 5); Alder Brook Poultry Farm, South Lancaster, (Pen 6); F. H. Foster, Andover, (Pen 7), and R. L. Clark, Waldoboro, Me., (Pen 8). The five pens of White Wyandottes are owned by Reuben Lowe, North Shapleigh, Me., (Pen 9); Edgewood Farm, North Andover, (Pen 10); Walter Combs, Hampton Falls, N. H., (Pen 11), and T. H. West, Haverhill, (Pen 12 and 13). There are also five pens of White Rocks, owned by Applecrest Farm, Hampton Falls, N. H., (Pen 14); Overlook Farm, Haverhill, (Pen 15); H. V. Sears, Saugus, (Pen 16); Essex County Training School Lawrence, (Pen 17), and S. Bradford Allyn, Belmont, (Pen 18). The six pens of Barred Rocks are owned by W. W. and J. A. Lord, Jr., Danvers, (Pens 19, 22 and 23); H. E. Wallace, Jr., Jamaica Plain, (Pen 20); Essex County Training School, Lawrence, (Pen 21), and Stanley DeQuoy, North Andover, (Pen 24). The 10 pens of R. I. Reds are owned by R. B. Parkhurst, Boxford, (Pen 25); E. E. Metcalf, Saugus, (Pen 26); Bert Stanley, Epsom, N. H., (Pen 27); M. S. and H. S. Richmond, Auburn, N. H., (Pen 28); Sweet Brier Rose Farm, Epsom, N. H., (Pen 29); Deer Brook Poultry Farm, Short Falls, N. H., (Pen 30); Essex County Training School, Lawrence, (Pen 31); Applecrest Farm, Hampton Falls, N. H., (Pen 32); Old Town Farm, Peter-

borough, N. H., (Pen 33), and R. E. Holmes, Stratham, N. H., (Pen 34).

Each pen in the contest is made up of 10 pullets, numbered from 1 to 10. Most all of the pullets come from pedigreed stock that has been bred for high egg production. All pens are exactly the same in equipment and construction, and the birds are fed exactly the same ration, but in varying amounts to suit the needs of the individual bird. In order to make the testing of the hens absolutely fair, it is necessary they all be managed in the same way.

Contest Rations.

Dry mash is kept before the hens at all times, and is composed of the following mixture: 100 lbs. wheat bran, 100 lbs. wheat middlings, 100 lbs. corn meal, 100 lbs. gluten and 100 lbs. beef scraps.

Scratch grain is fed morning, noon and night; at this time of year about 12 lbs. to 100 hens. One-third of this is fed early in the morning, a few handfuls at noon to keep the birds busy, and about two-thirds of the ration at 3.30 in the afternoon. This scratch grain is always fed in a deep litter of dry rye straw, 6 to 7 inches deep to induce exercise. The scratch grain is mixed as follows: 100 lbs. wheat, 100 lbs. oats and 100 lbs. cracked corn.

Leading Pens To Date:

First, Pen 31, Essex County Training School, R. I. Reds, 238 eggs; second, Pen 14, Applecrest Farm, White Rocks, 232 eggs; third, Pen 33, Old Town Farm, R. I. Reds, 225 eggs; fourth, Pen 10, Edgewood Farm, W. Wyandottes, 203 eggs; fifth, Pen 32, Applecrest Farm, R. I. Reds, 200 eggs.

MARKET GARDENERS AT ESSEX SCHOOL.

The Boston Market Gardeners' Association, which has a strong membership in Eastern Massachusetts, will hold one of their winter meetings at the school. The date decided upon is March 13th. Spraying is now becoming a vital issue with market gardeners and considerable time will be devoted to the study and demonstration of sprays suitable for their crops.

The Association plans to make this meeting one of their important events of the season, and the ladies will be invited guests. It is interesting to note that a special membership drive is now being conducted, over eight names were proposed at the meeting of Jan. 31. There is a large membership in the county, Danvers leading and Peabody following.

SCHOOL NOTES.

Cooperative Bee-Keeping Association.

The Cooperative Bee-Keeping Association was organized last year to enable students of the school to carry home projects in bee-keeping. Last summer several students availed themselves of the opportunity to secure bees and equipment through this association, and much valuable experience was gained in the management and care of bees.

This experiment of the association was very satisfactory, and this year equipment and bees will be supplied to members who wish to carry this kind of a home project. The following officers have been elected for 1920.

DONALD A. SCHER,
President.
WALLACE MORELAND,
Vice President.
HAROLD H. HENDERSON,
Secretary-Treasurer.
S. L. DAVENPORT,
Manager.

At the Joint Assembly, Jan. 21, a practice debate was held between members of the Forum Club and the Danvers High School. The trolley-jitney question was discussed, and much valuable experience was gained by those taking part. In the near future a team representing the Forum Club will visit Danvers High school.

HOMEMAKING DEPARTMENT

The work of the cooking division of the Homemaking department is now in charge of Miss Alice Bailey. Miss Bailey graduated from the public schools of her home town, Georgetown, Mass., and became a successful grade teacher. Later she graduated from the Framingham Normal School, where she specialized in cooking and sewing. During the war she had charge of dietetic work in connection with the Technology unit.

It has been decided to continue the adult extension classes in homemaking subjects. Classes in plain and advanced sewing and millinery will be organized. These classes will commence the last week of February. Full announcement will be made soon in the daily papers.

Another graduate of the Home Making department, who is making good in her chosen field of work, is Miss Marion Mathews, Class of '16. She is now teaching Domestic Science in Whitefield, N. H., High school.

Machine for Grain Inspectors.

Grain inspectors must know the exact amount of moisture in specimens submitted and a machine has been made to determine this in a thirty-minute test.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 2

HATHORNE, MASS., MARCH, 1920

No. 3

VEGETABLE GARDEN NOTES.

Gardeners should have their plans complete for the season, and seed, fertilizer and manure, either purchased or ordered. A test of seed for germination is of interest and value. Don't omit it. Often times one of the children will carry on this test, as well as anyone, and get much good from it. An accurate count of a fair sample of seed, right planting in suitable soil, care in watering, and maintaining temperatures, all give opportunity for skill in management. Growing plants invariably arouse the interest of the caretaker. Delegate some of this work to younger members of the family. Supervise the work closely, establish a family interest, and get your seeds tested before planting time.

Why Should the Boston Market Box Be Discarded?

For the past generation most of the boxes used in the New England produce markets have measured 18x18x8 inches, inside dimensions. It is not clear just how this size was adopted. Some claim that its holding capacity averages nearer the legal weights than any other size. Some assert that this size was adopted because it allowed the carrying capacity of a legal bushel, plus enough extra, so that boxes could be stacked without injury to its contents. In other words, so that the boxes may not be filled full and still give fair measure.

It is a fact that no markets of the country show a greater uniformity in packages, than do our New England Markets.

There are two principal factors which need to be realized to properly understand the situation. The first has to do with standardized measures. Goods are legally sold by cubical contents measure, weight or count. The adoption of a standard is important to facilitate trade and to promote fairness to all parties in a transaction. But so-called standards differ. Official weights adopted by states, per bushel of common food-stuffs found in our markets vary as widely as 50%, and in at least one

SEASONAL NOTES

Watch out for mice injury in young trees. Tramp the snow around the trunk of the tree.

Is the spray rig ready for spring use?

How about the broken parts of that mowing machine? They can be bought and replaced now with less cussing, and time is less valuable than in haying time, especially with Daylight Saving in effect.

Are the pig's sleeping quarters dry and free from drafts? It costs money to make pork in wet, drafty, pens.

A little linseed oil meal in the pregnant sow's feed from now till farrowing will put her in right condition to have a nice healthy litter without trouble, and don't forget plenty of charcoal and wood ashes.

Crude oil well rubbed into the hair around the tail and shoulders will kill cattle lice. It should be repeated two or three times at intervals of 10 days. It costs money to feed the little critters.

Have you figured out your fertilizer needs and placed your order? A considerable saving can be made by a group of farmers getting together and ordering a carload. Write the County Agent about the possibilities of co-operative buying.

Clover seed is high. Lime is cheap. Apply lime to those sour fields and watch the clover come that is lying dormant in the soil.

PURE BRED AYRSHIRES ARRIVE

In a recent carload of cows from Maine there were nine splendid pure bred Ayrshires. The Lawrence farm, Topsfield, who are building up a fine herd of Ayrshires, purchased two cows and a bull calf from Dr. John A. Ness, Ayrshire breeder and importer, Auburn, Me. The remainder went to A. H. Coombs, Amesbury; C. E. Stillings, Saugus, and Dr. E. W. Babson, Gloucester. Several of the cows have records of better than 10,000 lbs. of milk per year.

SCHOOL NOTES

The Forum Club held a debate with Hohen High school on February 20. The subject under discussion was, "Resolved, that a National Daylight Saving Law Is Desirable."

THE FIFTH ESSEX COUNTY EGG-LAYING AND BREEDING CONTEST

The birds showed a 10% increase in egg production for the four weeks beginning January 24, and ending February 13, 1920. They made a record of 37.1% egg production for the 15th week of the contest, which is higher production than has been recorded for the same period in either this contest or the international contest at Storrs, Connecticut. The weather has been extremely adverse to heavy egg production, with its many stormy and cloudy days and accompanying rapid variation in temperature.

Leading Pens

Mr. F. M. Johnson of Waldoboro, Me., the largest breeder of Leghorns in Maine is leading the other Leghorn pens with a total production to date of 322 eggs. Edgewood Farm, North Andover, is leading the Wyandottes, with a total production of 40 eggs. Applecrest Farm, Hampton Falls, N. H., the largest poultry farm in New Hampshire, has the leading pen of White Rocks, laying 435 eggs. Their pen of Rhode Island Reds are leading the Reds with a total of 408 eggs. Mr. H. E. Wallace, Jr. of Jamaica Plain, Mass., is tied with Stanley De Quoy of North Andover for first honors in the Barred Rocks with 244 eggs credited to each.

Close Race for First Place

Pen No. 14, White Rocks, Applecrest Farm, is leading the contest with 435 eggs. Pen 32, Rhode Island Reds, Applecrest Farm, is second with 408 eggs, and pen 10, White Wyandottes, Edgewood Farm, is third with 402 eggs. White Leghorn hen, No. 63, Alder Brook Poultry, South Lancaster, Mass., is leading the contest with a production of 72 eggs. Rhode Island Red, 328, is second with a record of 69 eggs. She is owned by Applecrest Farm. Hen No. 147, a White Rock, also owned by Applecrest Farm, is third, with a production of 68 eggs.

The affirmative was well handled by 3 students from the debating class of Danvers High, while the negative was upheld by Messrs. Cassano, Hersey and Poore of Essex Aggie.

ESSEX FARMER and HOMEMAKER

HATHORNE, MASS.

Published by the Trustees of the Essex County Agricultural School.

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Gladys E. Stratton, Home Demonstration Agent.

CALENDAR

Pomona Granges, March 3rd.

All general meetings at Hathorne have been cancelled, owing to the poor transportation facilities.

March 23d—State Department of Agriculture holds a general meeting under direction of Commissioner Gilbert. This is to be a meeting of very wide scope, interesting to farmers and citizens alike.

ESSEX COUNTY FARMERS OPPOSED TO DAYLIGHT SAVING

The returns on a recent questionnaire which was sent to representative farmers in the county, shows an overwhelming majority opposed to Daylight Saving. About 200 questionnaires were sent out and 128 returned; of this number 110 were opposed and 18 in favor of the scheme. The reasons given were: Hindrance of early morning work by dew, loss of sleep and reduced efficiency, early rising and lateness of retiring, increased cost of fuel for light on account of early rising, damage to hay crop because of short afternoons for curing and hauling, where day labor is used, annoyance from fact that cows do not come up from pasture an hour earlier, or hens do not go to roost till after bed time, indigestion caused by early dinners and late suppers, more loss from thieving because city people have more time to come out into the country and steal, loss of sleep from children who must get up early to go long distances to school and do not like to go to bed while it is still light, interference with rail-

road and government operations, and a general upsetting of the farm plans.

We note that a considerable number of city people are in favor of the plan, but hope our legislators will see the light and have some sympathy for the hand that feeds them.

Write, or see your representative in regard to it.

If the factories wish to begin work an hour earlier there is no reason why they cannot do it. Why add an unnecessary expense to the cost of food production?

RESIGNATION

It is with mingled regret and satisfaction that we chronicle the resignation of Ernest A. Howard, County Club Leader of our Farm Bureau Department. Mr. Howard, graduated from Essex County Agricultural School in the class of 1918, and immediately took up club work. He has been very energetic, successful and valuable in his work in the county. He goes to Cumberland county, New Jersey, in the same capacity. He has the united wish for success from his associates.

ALUMNI NOTES

Bradford Burnham has returned to Long Island, working with a landscape gardening firm.

Horton Bradstreet recently visited the school. He is in dairy work in Haverhill.

Ernest A. Howard left Massachusetts for his new position as County Club Leader in New Jersey.

Miss Mildred C. Annan has completed a very successful engagement with the Extension Service of the Massachusetts Agricultural College. She will assist Miss Stratton in Essex County Farm Bureau work during March.

BEE KEEPERS OF ESSEX COUNTY

Are you starving your bees to death? Let us hope not, but there are many hives that will die before spring unless attended to at once. On the first warm day, open the hives carefully and see how the food supply is holding out. If short of supplies feed soft candy. Bulletin No. 7A, "The Making of Soft Candy for Bees," may be obtained by writing to the State Department of Agriculture, Boston, Mass. If we can assist you in the care of your bees, write or call, the Bee Department.

ATHLETIC ASSOCIATION DANCE

FRIDAY, APRIL 9

HOMEMAKING DEPARTMENT NOTES

Viola Hazzard, class of 1920, was married January 24th at her home in Wenham to Ralph S. Foster of Essex. Mr. and Mrs. Foster have begun housekeeping in Essex.

Elizabeth O. Palmer, class of 1916, was married on Saturday, February 28, to Mr. Edward R. Little, in the Unitarian church, Peabody.

Helen Young and Elizabeth Brown, High school specials, who have been conducting classes in cooking at the Peabody Community House, have finished their work, and Ruth Edwards, High school special, and Janet Stanley, 1921, have taken their places.

The electric dishwashing machine given to the Homemaking Department by the Essex County Associated Boards of Trade, has been installed in the kitchen, and has proved to be a valuable time saver.

A valuable demonstration on Meat Cutting was given recently by the head of the meat department of Cobb, Bates & Yerxa Co. This was followed by a visit of the students in the Homemaking Department to the cold storage plant of the same firm in Salem.

Miss Ethel Sturtevant, instructor in the Framingham Normal school, spoke to the students recently. She told them of the new department recently opened by the State Board of Education at Framingham. This department trains young women to become teachers in Homemaking schools.

The following pupils are conducting Home Economics classes connected with the Essex Co. Farm Bureau: Misses Eleanor Murphy, Helen Lewis, Grace Hartman, Gladys Anderson, Pauline Moore, Amy Fogarty, Jessie Foster and Margaret Wallace.

WHAT ABOUT PRUNING

Authorities agree that this is the best time of the year to prune our trees and since we have been unable to get at it before, let us sharpen our saws and start in. No other operations in the orchard will give us greater returns than proper pruning, followed by correct spraying. Thousands of bushels of poorly colored and sooty-fungus covered apples are put on our markets each year. Proper pruning will give us fruit of high quality and with less sooty-fungus. Let us grow quality fruit this season and start now by proper pruning. For further information call us, we are at your service.

WITH THE FARM BUREAU

WHAT IS THE ANALYSIS OF THE FERTILIZERS YOU ARE BUYING?

(By Earl Jones.)

In New England we have been using fertilizers as long and in as large quantities per acre, as in any part of the country.

Yet many of us do not know what kind of fertilizers we are using. We know the brand names and the price, but not the composition. We buy Smith's Corn and Grain Fertilizer or Jones' Dissolved Bone Fertilizer, year after year, without knowing what the analysis is. In other words, we do not know how much plant food it contains, and this is what determines the real value of a fertilizer.

What is the meaning of the analysis of a brand of fertilizer as given in the small handbooks distributed by the fertilizer companies or on the fertilizer bags?

Guaranteed Analysis

Nitrogen, 1.64 per cent.; equal to ammonia, 2.00 per cent. available phosphoric acid, 8.00 per cent.; total, phosphoric acid, 9.00 per cent. potash (actual), 4.00 per cent.

This is a 2-8-4 fertilizer. It contains 2 per cent. of ammonia, 8 per cent. of phosphoric acid and 4 per cent. of potash.

There are three points in the analysis that indicate the amount of plant food in a fertilizer and hence its real value; the percentages of ammonia, available phosphoric acid and potash. Thus a 3-10-4 fertilizer contains three (3) per cent. of ammonia, ten (10) per cent. of available phosphoric acid and four (4) per cent. of potash.

The fertilizer manufacturers have recently started a movement to sell fertilizers on the basis of their analysis rather than brand names. Many are now advertising both the brand name and the analysis as, Knickerbocker Phosphate 2-8-2.

It is only by studying the analysis of fertilizers that they can be intelligently used. A study of the brands put out by two or three fertilizer companies will show that corn fertilizers vary considerably in composition and the same is true of potato fertilizers.

More attention to the analysis of the fertilizers purchased, will eventually mean more economical use of fertilizers. The only way to start this is to know the analysis of the brands of fertilizers we are using this year. Are you using a 3-10-0 or a 3-8-4 or some other analysis on your potatoes this year?

MILLINERY GROUPS

On account of the success of the millinery work last year, under the instruction of Miss Mildred Annan, more groups are to be given an opportunity to take the work this spring. These groups are scheduled as follows:

MILLINERY SCHEDULE, 1920									
Town	March			April			Day	Leader	
No. Andover	1	8	15	—	—	—	Mon.	Mrs. Benj. Farnum	
West Newbury	—	—	—	22	29	5	Mon.	Mrs. Lawrence Dodge	
E. Boxford	2	9	16	—	—	—	Tues.	Mrs. T. P. Killam	
W. Peabody	—	—	—	23	30	6	Tues.	Mrs. H. H. White	
Peabody	2	9	16	23	30	6	Tues.	Mrs. Fennessy	(51 Lowell St.)
Topsfield	3	10	17	—	—	—	Wed.	Mrs. Susie Thayer	
No. Saugus	—	—	—	24	31	7	Wed.	Mrs. Willard Moses	
Marblehead	3	10	17	24	31	7	Wed.	Mrs. Hooper Shaw	
Peabody	4	11	18	—	—	—	Thurs.	Mrs. Rose Holden	(115 Lynnfield St.)
W. Andover	—	—	—	—	25	1	8 Thurs.	Mrs. Phillip Nooar	
Peabody	4	11	18	25	—	1	8 Thurs.	Mrs. J. J. Shannahan	
Cliftondale	5	12	19	—	—	—	Fri.	Mrs. E. K. Hayden	
Saugus Ctr.	—	—	—	—	26	2	9 Fri.	Mrs. John Beckwith	
Marblehead	5	12	19	26	—	2	9 Fri.	Mrs. Hooper Shaw	

Any who are interested in this part of Extension work should apply early if they wish groups started in their town in the fall, as it is necessary to make our arrangements some time in advance.

CLOTHING EFFICIENCY GROUPS

Four groups who have been taking the first course work in clothing are completing their work this month. Four more groups, beginning on the first course the latter part of February and the first of March, will be given the series of six all day meet-

ings once a week. As soon as possible, all groups having taken the first course will be given the advanced work. Any groups interested in this work, who wish to know more about it, or who would like to have the work, should apply to the Home Demonstration Agent.

PUREBRED SIRE CAMPAIGN

The county committee, Messrs. Averill, Dodge and McDonald, have appointed the local men to assist in securing a bull census in Essex County. Each man is getting a list of owners of grade bulls, pure bred bulls and bulls from dams with records of at least 10,000 lbs. of milk per year. Some very interesting figures are being collected.

We know of a yearling Holstein bull from a cow which under ordinary farm conditions gave over 15,000 lbs. of milk last year. This bull can be bought, tuberculosis tested, for \$170. His first heifer ought to give enough more milk than a heifer from a scrub bull to pay his entire cost. Call the County Agent.

Mr. Edson Walker, Merrimac, has just bought a son of the A. R. Guernsey cow, Yeoman's Mixer Queen, from Miss Katherine Silsbee, Beverly.

Mr. Vasal Primpas, Saugus, has arranged with Mr. I. H. Sawyer, Topsfield, for the exchange of his scrub bull for one of Mr. Sawyer's fine pure bred Holsteins. Let the grand work go on.

GENERAL MEETING OF PURITAN FARM LOAN ASSOCIATION

The Puritan Farm Loan Association of Haverhill which is the Essex county branch of the Federal Land Bank, held its annual meeting at the office of the Haverhill Chamber of Commerce recently. The regular business was attended to and the following officers elected:

President, L. G. Dodge, West Newbury; Vice President, Chauncey Gleason, Haverhill; Secretary-Treasurer, E. M. Folger, Lynn; Assistant Secretary, R. H. Gaskill, Hathorne.

Directors: John McDonald, West Newbury; Chauncey Gleason, Haverhill; J. L. Stewart, Amesbury; L. G. Dodge, West Newbury; Mrs. Thomas Downe, Boxford; Mrs. M. S. Shute, West Newbury.

PLANT SOY BEANS IN CORN SILAGE NEXT YEAR

The men in the county who planted Soy Beans in their corn for silage last year were very well pleased with the results. They are a cheap source of protein and further they improve the soil when inoculated.

VEGETABLE GARDEN NOTES

(Continued from page 1)

instance 100%. This is a manifestly absurd situation. That a bushel of potatoes should weigh 56 pounds in one state, and that an adjoining state should proclaim 56 pounds, 6 2-3% under a bushel, is ridiculous, and yet this condition holds. This is one of the smaller differences.

Again, there is a fairly wide variation in weights, per U. S. standard bushel by measure, of different varieties of apples or of the same variety at different seasons of the year. The same holds true for vegetables. No single package could hold "legal" weights and be filled as the trade demands for one state alone, to leave out of consideration interstate traffic.

In handling vegetables or fruits with a high water content, or those products which require washing before marketing, wholesale trading by weight is next to impossible. The logical conclusion is that some other standard should be adopted. We have a United States standard bushel of 2150.42 cubic inches, made standard by federal law, acceptable in trade in any state in the Union. In fact, Mr. Fred P. Downing, specialist on market packages, of the Bureau of Markets, United States Department of Agriculture, states that he believes that standard bushel weights of farm products throughout the nation should be adjusted to conform to the weights which this standard bushel will hold, under average conditions.

The present Boston market box has a capacity of 2592 cubic inches. This is 441 cubic inches or 20% over a standard bushel. In spite of this fact, the Boston box is known as a bushel, so talked and traded, although most handlers appreciate the inaccuracy of this statement.

Futhermore, products from the South and West come into our markets in containers holding a U. S. Standard bushel. Prices of local products in the Boston box are frequently graded according to that of imported produce, the buyer accidentally or otherwise losing sight of the difference in measure of the two containers. Therefore, the second consideration is, that buyers not infrequently set retail prices on the basis of the purchase price of the Boston box of produce as a bushel.

There are men who have had boxes made smaller than the 18x18x8 inch

box, and used them more or less continually without detection and without doing other than protecting their own interests.

Rhode Island has adopted a box $17\frac{1}{2} \times 17\frac{1}{2} \times 7$ 1-16 inches, which holds about 14 cubic inches over a U. S. Standard bushel, and which is coming into our markets in considerable numbers. A change to conform to the R. I. package will give us a standard measure, within the provisions of the law, which permits a tolerance of 50 cubic inches above or 30 cubic inches below the exact measure.

It is proposed that all boxes of the new type be marked, so that there will be no uncertainty on the part of seller or buyer, as to the legality of the package used, and no opportunity for misrepresentation.

Green Manures.

It is possible to make the soil grow its own manure. It comes down to a question of cost for value received. Some means of increasing and maintaining the supply of organic matter in the soil is absolutely necessary, the time is not far off when an adequate supply of stable manure will not be obtainable at any price. To grow crops which will supply the needed humus and to supplement with commercial fertilizer, seems the business like way out.

While this plan may seem like an experiment, to some intensive vegetable growers, it has been in operation in Massachusetts for years. One leading grower has maintained and even increased the productivity of his farm through the combined use of green manures and commercial fertilizer. This practice is 30 years old, and the man who has practiced it is H. A. Cook of Shewsbury, the President of the Worcester Market Gardeners' Association. Investigation has uncovered similar practices on the part of experienced successful growers. These men have used this method because they have found it most economical. The day will soon arrive when its adoption by the majority of growers will be a necessity. Your farm bureau is prepared to give you service in handling this problem. Your individual problem will be studied, if you so desire. The Department of Vegetable Gardening of the College will cooperate with your county agent and try to give you some of the service that these institutions stand for, and that you pay for, whether you avail yourself of it, or not.

MANURE AND ACID PHOSPHATE FOR CORN

The high price of fertilizers and other materials has made it necessary for farmers to practice all reasonable economics. Most of the corn produced in Massachusetts is grown on manured land and in the majority of cases some commercial fertilizer is used in addition to the manure. In most cases, this fertilizer is a mixed fertilizer containing nitrogen, phosphoric acid and potash, (when the latter is available at reasonable cost.)

Since fertilizer prices have advanced many farmers have been questioning whether the fertilizer bill could not be reduced in this particular place. It has long been known that manure is relatively lacking in phosphoric acid and that phosphoric acid is needed to assure early maturity of corn, whether field or silage. Not only is manure lacking in phosphoric acid, but it is rich in nitrogen, which delays maturity unless it is supplemented with phosphoric acid.

Within the past few years many farmers have grown satisfactory crops of corn, using nothing but acid phosphate to supplement moderate or heavy applications of manure. From 300 to 500 pounds per acre was used in most cases. Farmers from all parts of the state have done this very satisfactorily. (There is a question about doing this where the seasons are short and the springs late. Where it is questionable it would be better to try it out before adopting it as a practice.)

At the present time a ton of acid phosphate costs from \$28.50 to \$30 per ton, while brands of fertilizer containing 2 to 3% of ammonia and 8 to 10% of phosphoric acid cost from \$45 to \$55. It seems then that there is a possibility of economizing in the fertilizer bill by using acid phosphate alone for corn, when the land has been well manured.

We have been reading for years that acid phosphate should be mixed with manure either in the stable, the manure shed, or on the spreader before hauling to the field. This is a satisfactory practice and an economical means of applying the acid phosphate to the field. As far, however, as the acid phosphate is concerned, it is effective when applied in the spring directly to the land.

It is usually recommended that 40 pounds of acid phosphate be used for each ton of manure or, in other words, about one pound per day for each 1000 pounds animal in the stable.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

Vol. 2

HATHORNE, MASS., APRIL, 1920

No. 4

MILK AS FOOD

That there is a close connection between the diet and the health of an individual is freely admitted. Dr. McCollum, who has devoted his entire time for the past 13 years to the study of nutrition, has reached the conclusion that milk should be given particular prominence among food-stuffs, because of its unique value as a protective food. Food must do more than satisfy the appetite and supply sufficient calories and protein to meet the bodily needs. It must maintain health by furnishing certain protective substances to the individual. These protective substances are lacking or are insufficient in most articles of food. They exist abundantly in only two articles of diet, namely, in milk and in leafy vegetables, such as lettuce, spinach, cabbage, etc. These protective foods are essential not only for maintenance of health, but also for satisfactory growth in the young. Leafy vegetables are not nearly as well adapted for protective foods for man as milk, for the reason that they cannot be consumed in sufficient quantity.

Several diseases are known to be caused by a faulty diet, Beriberi, prevalent in the Orient among peoples subsisting almost entirely on degerminated grains, disappears when protective foods are added to the diet. Pellagra, common in localities where the diet is poor, especially where meal made from degerminated corn is used as the chief food, is practically unknown in regions where the protective foods are used in liberal amounts. Scurvy appears only among people restricted to a diet of preserved foods devoid of fresh fruits, vegetables, milk and meat. Rickets is common among the children of the very poor, who live on a diet of degerminated wheat, corn, rice, together with tubers and meat. Dr. McCollum says "An examination of any large groups of people will show that where there is a high mortality from tuberculosis, milk is not being used to any great extent, and in any large group where milk purchases are large, this disease is not a menace. It is well known that in institutions where tuberculosis

SEASONAL HINTS

Make a careful plan for the home garden before it is time to plant.

Send 20c to your County Agent for a Farmers' Account Book. Now is the time to do it.

If you buy stock day old chicks or eggs for hatching be sure you deal with reliable breeders.

Dead and diseased trees should be removed from the woodlot.

Spot the robber cow before she goes to pasture.

Early lambs and pigs pay big returns for painstaking care, especially when small.

Save valuable time and get better seeds by buying while the picking is good.

Are you using a good system of accounts? Now is the time to begin.

Do not waste time hatching eggs from stock lacking in constitutional vigor.

Plans for summer crop production need to be matured early.

Fertilizer materials are best purchased when in full stock and before the rush season begins.

If a standard make of incubator is used and instructions accompanying the machine carefully followed splendid results are likely to follow.

Before you are dissatisfied that your farm does not pay better be sure you keep accounts well enough to be able to locate the leaks.

It is poor farm management that does not bring continued improvements.

Such a winter as this should not pass the New England farmer without leaving a more vivid appreciation of Whittier's "Snowbound."

The lengthening periods of sunlight give the farmer great opportunities for daylight saving.

Remember that a good early rolling of the lawn adds very much to its appearance, value and usefulness.

Pruning of grapes should not be delayed. The season will apparently be very early. No pruning should be practiced after the vines "bleed."

Small fruits should receive careful attention in the matter of pruning and fertilizing. The injury to bush fruits has been heavy this year from the weight of snow. All broken or injured parts should be pruned away.

ESSEX COUNTY AGRICULTURAL SCHOOL HONOR LIST

Honor students of this school for the first half of the school year 1919-1920 are named below. These students are cited for their all-around efficiency and general high standing in the work of the school. Their work merits special recognition.

Agricultural Department

Eric Bergstrom	Lynn
Joseph Cassano	Groveland
Harold Henderson	Andover
Leonard Ives	Salem
Stephen Ives	Danvers
Gerald Knightly	Methuen
Marion Severance	Lynn
Raymond Stevens	Marblehead
Maynard Tucker	Gloucester
Charles Vratatos	Salem
John Wood	Beverly

Homemaking Department

Jessie Foster	Haverhill
Gladys Anderson	Hathorne

RESIGNATION

Ralph H. Gaskill, who has served the Farm Bureau Department as County Agent for the past two and one-half years, has resigned to accept the position of Manager of the Essex County Cooperative Farmers' Association. We are very sorry to lose Mr. Gaskill, as he has rendered exceptional service to the county. On the other hand, we must feel that the farm interests will be splendidly served by him in his new capacity. His office is at Topsfield, Mass.

NEW COUNTY AGRICULTURAL AGENT

The Trustees have appointed Robert M. Stiles as County Agricultural Agent. Mr. Stiles' appointment takes effect April 1. The appointee is not a new man to the county since he has been a regular instructor in animal husbandry on the Agricultural School staff since July 1, 1919. Mr. Stiles has had previous experience in farm bureau work in Maine.

Mr. Stiles has had a wide experience in organization work, and also with the problems relating to the dairy, sheep, swine, fertilizers and field crops. The farm interests are to be congratulated on such a good appointment.

ESSEX FARMER and HOMEMAKER

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

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BOARD OF PUBLICATION

Fred A. Smith, Director.

John S. Carver, Farm Bureau Department.

Marion P. Crawford, Homemaking Department.

Harry A. Farrar, Agricultural Department.

Ralph H. Gaskill, County Agricultural Agent.

George E. Gifford, Agricultural Department.

Olaf A. Olsson, Alumni Editor.

Gladys E. Stratton, Home Demonstration Agent.

EDITORIAL

With this number and following through several other succeeding issues the Farmer will attempt to print a little sketch of some of our graduates. Young men and women have been graduating from the departments of this School for a sufficient number of years and we are able to get a very good index and picture of their work. While it will be impossible to call attention to a large number, we shall undoubtedly be able to make it very clear that the graduates are fulfilling their mission and following the field for which they have been trained.

As we go to press the battle on the adoption or rejection of the daylight saving law is still being waged. Everything points toward a decreased production of food during the current year. While the farmer and his convenience has been swept aside, and he is told that he numerically represents only a small minority, the consumer is undoubtedly awakening to his possible plight.

The general confusion in train schedules and in office hours and many other situations which are bound to arise, together with the confusion and annoyance, is causing many people to be thoughtful.

DO YOU TEST YOUR SEED?

How much is it worth to know how much seed to sow to get a stand thin enough to save labor of thinning and thick enough to avoid skips.

Of course all seeds that sprout between blotters may not grow in the field, but note the vigor of the sprouts and you will be wiser.

Is not the best seed the cheapest?

How can a grower afford to take chances with any but the best seed obtainable, when the loss from poor stand or any other short-coming of the product may be greater than a five years seed bill.

OUR NEW COUNTY CLUB LEADER

It is with pleasure that we announce the appointment of Mr. Edwin E. Bergstrom of Lynn, Mass., as County Club Leader. Mr. Bergstrom is a graduate of this school in the



Edwin E. Bergstrom

class of 1919. While a student he did very creditable work, and also played a prominent part in the various school activities.

Mr. Bergstrom is well qualified to take up his new duties with the boys and girls of this county. During the summer of 1918 he was supervisor of school gardens at Methuen, where he did much toward the organization of junior clubs in that city. Since graduation he has been employed by the Breck-Robinson Co. of New York at Lexington, Mass.

On his return to the school he received a hearty welcome from his former classmates, which intimates that the new Club Leader is one of our most popular graduates.

ALUMNI NOTES

Stuart Barnaby, '18, has changed his occupation. He is associated with a florist establishment in Brookline.

The following were in attendance at the meeting of the State Board of Agriculture at the school on Tuesday, March 23rd: Bergstrom, '19; Lewis, '18; Sweeney, '16; Tarr, '18; Plummer.

Horton D. Bradstreet, '18, is foreman in charge of livestock on the A. Schlehuber farm in Wenhams.

Ruth Estes, '19, is employed in a florist shop in Groveland.

Prince Woodberry is with the U. S. D. A. Bureau of Entomology.

J. Houston Lovett, '18, and Gilbert Tucker, '19, are students at the Connecticut Agricultural College at Storrs.

On January 1st, Edwina Hodges, '18, was married to Irving Libby of Bradford.

Donald Hodgdon, '17, is now located in North Conway, N. H.

Gordon Woodberry, '18, is a landscape draftsman with the Farquhar Company of Boston.

Stanley DeQuoy takes on the work of general poultryman at the Egg-Laying Contest at the School on April 1st.

Roy Cushing and Charles Chapman are with the A. C. Lawrence Co., of Peabody.

Ralph Woodworth is herdsman at the Monstone Farm at Ipswich.

Carl Stanton is a superintendent gardener in Falmouth.

SCHOOL NOTES

Calvin Poor, 1920, of West Newbury, has accepted a position with the Mountain Lea Farm, Pittsfield, Mass. Mr. Poor will have charge of a high grade herd.

Joseph Cassano, 1920, of Georgetown, is working at the Edgewood Farm, North Andover, where he has full charge of the poultry plant.

The Senior Class banquet will be held on April 14th at Hotel Thorndike, Boston. The arrangements are in charge of Messrs. Hersey, MacDonald and Whalen. Mr. and Mrs. F. A. Smith and Mr. and Mrs. F. H. Wilson, Jr., of the Faculty have been invited to attend.

Messrs. Osborne, Scher and Ives of the Senior Class spent the week of March 15th in Vermont, where they assisted in making maple sugar on the farm of one of the instructors.

Harold Hansen of Beverly and Stephen Ives of Danvers represented the School in the sheep judging and shearing contest at M. A. C. on March 17th.

WITH THE FARM BUREAU

BREEDING TO INCREASE EGG PRODUCTION

Everywhere hen men are awakening to a realization that some hens lay more eggs than others do. They are also beginning to realize that it costs no more to breed, house, feed and care for good hens than it does for poor ones. This means that, as far as utility stock is concerned, the balance of profit is entirely in favor of the high producer.

But few realize how much it favors the high producer. Only the margin over and above the cost of maintenance yields profit. Is the 200 egg hen twice as profitable as the 100 egg hen? Let us see. If the cost of maintenance measured in eggs, approximates 90 eggs a year, one hen yields a profit of but 10 eggs, and the other of 110 eggs or 11 times as great. This, provided all eggs are of equal value, but as everyone knows, the hen that lays many eggs extends her production over a longer period and into seasons when values are high.

There are two methods by which egg production may be increased. (1) Improving environment and care to provide more favorable opportunity, and (2) breeding for fecundity, or innate reproductive capacity. It is this latter point herein discussed and, of course, it should not be attempted until the utmost is done in management.

Selection of Females

Saving hatching eggs from the entire flock is not good practice. Selected breeding pens should be used. Trap-nest records are, of course, the only accurate measure of egg production. These records need not extend over the entire year. Fall and winter operation of trap-nests determines which pullets lay early and consistently, and a complete year's record would usually confirm these birds as the best layers.

Owing to the labor involved in their operation, trap-nests are not always practical on the farm. Fortunately there are other means of determining, with some degree of accuracy, the best layers. Observation of the flock in fall and early winter will enable the poultryman to note which pullets mature early and frequent the nests. Examination will ascertain whether or not they are laying, and those which do mature and lay early may be banded as eligible for selection as breeders. If the following summer they lay late and continue well in-

to the fall before moulting, their value as producers is made certain. At this time of the year, (February), and from now on, a valuable index of a pullet's production is reflected in the coloring, or rather lack of yellow coloring, in her shanks. The pigment which gives the yellow color to the skin, beak and shanks of yellow legged breeds is identical with that which colors the egg yolk. Laying exhausts the body of this coloring matter and the beaks and shanks of good producers become quite faded as contrasted with those of drones, which retain the pigment normally present in pullets when matured to lay.

SOY BEANS

Farmers are writing in frequently to ask for more information concerning Soy beans. As a crop for silage, hay, forage and green crop, this plant is proving to be a wonder and the middle West and middle South are making rapid strides in the handling and using of this crop. Early maturing varieties are being developed at our stations. Farmers who are looking for inexpensive home grown protein foods would do well to look into this crop.

Inoculation for this crop proves to be essential. If the reader is interested it may pay him to address the Farm Bureau of this School for further assistance.

The School has a limited stock of inoculating bacteria in soil which it will be glad to supply to those who have already secured soy bean seed. This may be secured by addressing the Farm Bureau Department, Hathorne, Mass.

GOOD SEED

Already emphasis has been placed on securing good seed. Planting time is not far off, and the best seed should be obtained. The vacant spaces often mean the difference between a profit and not any at all. To get a full stand, good seed is required, land in good condition and careful sowing.

IMPORTANCE OF FERTILIZER

Every farmer should consider the importance of making every acre of land do its utmost this year. This may mean spending \$150 per acre for manure and fertilizer instead of \$70 to \$100, which may have been spent formerly. The results in production and quality, as well as in labor saving, will outweigh the extra cost.

PURE BRED SIRE CAMPAIGN

The county committee, Messrs. Averill, Dodge and McDonald, have appointed the local men to assist in securing a bull census in Essex county. Each man is getting a list of owners of grade bulls, pure bred bulls and bulls from dams giving at least 10,000 lbs. of milk. Some very interesting figures are coming in.

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Mr. Vasal Primpas, Saugus, has arranged with Mr. I. H. Sawyer, Topsfield, for the exchange of his scrub bull for one of Mr. Sawyer's fine pure bred Holsteins. Let the grand work go on.

We are anxious to keep a record this year of all replacements of grade bulls with pure breeds, and will appreciate it if you will inform the County Agent of any case coming to your attention. Progress of this kind is the making of real history and should be recorded.

MICE INJURY

With the disappearance of snow great injury is encountered in the fruit orchards and also among the ornamental shrubbery. A census would show injury to hundreds of young and bearing trees. Mice and other injury causing animals have been very active under the heavy blanket of snow. One who has experienced this injury should hasten to coat the wounds with grafting wax, white lead paint and, if possible, hill around the wound with soil.

If further assistance is needed, write us for help.

STANDARD PRODUCE BOX

House Bill No. 1329 dealing with the standardization of the produce box has been referred to the next General Court. We regret that progress which would be made by the passage of this bill is likely to be deferred. It behoves all interested in this bill to support it vigorously during the coming year.

MILK AS FOOD

(Continued from page 1)

is successfully treated, milk forms the principal article of diet.

The Massachusetts Special Milk Report for 1915 mentions a New England city of 120,000, having a total daily milk consumption of 27,000 quarts, less than a half pint per person per day. The infant mortality rate was 171 per year for each 1000 babies. Raw milk was used in very much smaller amounts than it should have been, condensed milk, beer and coffee being substituted instead. In one city of the United States where milk was generously used the infant mortality rate for the year 1918 was only 35 per 1000. One of the most important factors in reducing infant mortality is plenty of good clean milk.

The average American consumes about one-half pound of meat a day, that is, about as much meat by weight as milk. It is believed by practically all authorities that the best interests of health and of economy would be served by reducing the use of meat and increasing the use of milk.

Two good rules for families of any income to follow are: (1) to spend at least as much for milk as for meat; (2) to spend as much for fruits and vegetables as for meat. Meat can be eliminated without danger to health, provided milk is still used. In fact, many believe that such a change in food habits would have a beneficial result.

A survey made in the tenement district of New York City during 1917 among 2200 families, all containing children under six years of age, disclosed the fact that as an average one-half pint of milk per person per day was being used, over half of these households had reduced the consumption of milk over the previous year. In over three-fourths of these cases where milk had been reduced, tea and coffee had been substituted for milk and the mothers stated either that the children were not gaining, or that they were losing weight. Children require a more nutritive diet than adults do, and the results of a poor diet are soon evident in the young.

Dr. Holt in 1917 testified before the Mayor's Committee on Milk (N. Y. C.) as follows: "For infants during the first year a quart of milk a day is necessary; for the second year

a pint and a half. For children between the ages of 2 and 6, the daily ration of milk should be a pint a day as a minimum. I should think that after 6 years of age up to 12 or 13 years, a pint of milk a day ought to be allowed to all children." Professor Sherman testifying before the same committee said: "We cannot expect a good community dietary if that community uses less than one-half quart of milk per capita per day." These recommendations are based on the smallest amounts of milk compatible with health. The quantities should be increased rather than diminished. Many authorities recommend a quart a day for every child up to 12 years of age, and a pint a day for every person over 12 years. If milk was used by every one, according to the latter rule, there would be a wonderful improvement in health, and a decided increase over the present consumption of milk.

Unfortunately, there are many farms where milk, though plentiful, seldom appears on the table. Anything that can be said regarding the food value of milk applies to its use on the farm, as well as to its use in the city, and there is this fact in addition—milk costs the farmer about one-half as much as it costs the city man. No farmer can afford to neglect the free use of milk as a food for his family.

Milk is not only a substitute for meat, it is an improvement over meat. The free use of milk on the farm means reduced food bills, but more important than this, it means better health, greater capacity to work, and an increased joy in life. Milk used in cooking gives full value in nourishing the family, and such use is a wise practice which should be extended. In the majority of farm homes milk does not appear regularly as a drink. We all know how well pigs and chickens thrive on milk—even skim milk. It is certain that milk is as beneficial for man as for farm animals.

We use tea and coffee entirely for the pleasurable sensation given by the beverages. They have no food value aside from the sugar and milk used with them. In fact, tea and coffee become injurious to health when consumed excessively, and are detrimental to children in any quantity. Milk as a beverage, on the contrary, has a high food value, insures good health, and in the long run gives greater pleasure than either tea or coffee.

HOMEMAKING DEPARTMENT

Ruth C. Edwards of the High School specials has gone to Brooklyn, N. Y., to take up a course of library work.

Miss Ruth Simms, instructor in Millinery, gave an interesting demonstration recently on the "Making of a Spring Hat" before the Tuesday club of the Maple Street Church in Danvers.

The Extension Classes for adults are well started with a membership of 45. Classes in Advanced Dressmaking, Elementary Dressmaking and Advanced Millinery are now being held. Elementary Millinery and Cooking Classes will be started later in the season.

During the enforced vacation of the Homemaking Department, Margaret Wallace, of this class of 1920, substituted in one of the schools in Ipswich. Gertrude Russell, Class of 1921, spent the entire vacation assisting in the kitchen of the Salem Hospital.

On Friday, March 26th, the pupils and teachers, upon the invitation of Mr. Creevy, made a very interesting visit to his greenhouse in Salem and saw the plants in bloom for Easter.

MOTOR CULTIVATORS

The hand motor cultivator has probably come to stay and will be a big item in reducing labor costs. They seem to be more generally used in the middle West than in the East. The operator should be familiar with machinery and understand how to handle motors to advantage. The best test is to use one on your own farm, handling the machine long enough to see how it works. There is a knack to it which cannot be learned without some experience.

EFFICIENT FARM MANAGEMENT

Efficient farm management has never been needed more than in the spring of 1920. Men in every business are undertaking their work under a greater strain and with much uncertainty. Greenhouse vegetable growers have had a trying experience since January 1 with fuel and labor supply lessened and transportation at times completely crippled. Then as a climax, legislation actually harmful to agriculture has been enacted.

Do not neglect to protect wounds on fruit trees. A lead paint coating furnishes the best protection yet discovered.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

Vol. 2

HATHORNE, MASS., MAY, 1920

No. 5

SPRAYING THE APPLE

During the month of May two of our most important sprayings on the apple should be given, if we expect to harvest a crop of fine fruit next fall. It is no longer a question whether spraying will pay or not, but rather, what are the most important sprayings, what materials should be used, and when they should be applied. Good fruit this season will bring exceptionally high prices, and every cent spent in proper spraying will bring good returns. Under present conditions, we must not omit one spraying. However, the lack of labor and high prices makes it absolutely essential that in our spraying program, we must practice the strictest economy, particularly in the number of sprayings, and the kind of materials that we use. We must not, however, cut down too heavy on the number of sprayings or invest in low grade spray materials. Power sprayers, spray guns and good hose are most essential for different work under present conditions.

The two important sprays which come this month are the so-called "Pink Spray," which comes just before the blossoms open, while the blossom buds show pink, and the "Calyx Spray" which comes just after the petals have fallen. This later spray usually comes from seven to ten days after the first. These are two of our most essential sprays, and by the use of right materials applied at the proper time, we should be able to control most of our worst pests.

The most common pests that can be controlled or prevented by the "Pink Spray" are the Apple Scab (which is a very serious disease in Essex county, especially on the McIntosh Red, etc.), Tent Caterpillar, Plant Lice, Ciuculio, Brownail, Gypsy, etc. One of the best combinations of materials to use to prevent and control these pests is the following: One and one-half to two pounds of powdered arsenate of lead, one gallon of liquid lime sulphur, three-eighths of a pint of 40% of nicotine sulphate to 50 gallons of water. These materials may be mixed together and applied at one time. If plant lice are not present, the nicotine may be omitted, but just be absolutely sure that lice are not present. Do not, however, omit the lime sulphur, as it is most essential in the prevention of apple scab.

(Continued on page 4)



Better Sires—Better Stock

PURE BRED SIRE CAMPAIGN CONTINUES

To the men who will sign a declaration that in the future they will keep and use only pure bred sires of good quality to head their herds, will be given a neat, attractive letter live stock emblem from the United States Department of Agriculture. At the same time the names of men signing this declaration will be placed on the official enrollment in the crusade for better live stock.

One of the broad-minded men of Essex County, who is interested in live stock improvement, has offered to exchange a pure bred Ayrshire bull, ready or nearly ready for service, for your scrub bull without cost to you, if you are really interested in improving your herd.

Another man, who is a breeder of Holsteins, will trade a pure bred bull for your scrub by your paying a small difference.

With such men as these in the county, what reason is there for holding to a poor scrub bull?

The County Agent will gladly assist you in making the change.

JOSEPH W. HAGGERTY

Class of 1917

Died at his home in Danvers on
Thursday April 29th

In the death of this graduate the
School loses a loyal friend.

SEASONAL ITEMS

Have you tested your seed?

Mighty handy to know how many seeds will not come up when adjusting the seed sower. Time yet to test some kinds.

As a general practice it is better to put a light coat of manure on all the land backed up with fertilizer than to put all fertilizer on one piece and all manure on another. Beneficial bacteria is the reason.

The man with a gravel subsoil has the advantage when too much rain falls.

Likewise the fellow with strong land when drought comes. Irrigation and humus for the gravel. Humus, lime and drainage for the retentive land.

Discouraging weather this year, but the line of least resistance leads to the lowest point of the market.

Time is saved in raising potatoes by exposing seed to the sun a few days before planting.

If seed potatoes are infected with scab or the disease is in the soil, seed should be soaked for two hours in a solution made of one pint of formalin to 20 gallons of water.

The farmer who would prevent nominal "daylight saving" from becoming actual daylight wasting should hire his help by sun time.

Many acres of what is virtually waste land, and even burdensome to its owners, may be made a source of large revenue by planting and a little intelligent care. Now is the time to plant.

ESSEX FARMER and HOMEMAKER

HATHORNE, MASS.

Published by the Trustees of the Essex County Agricultural School.

A Monthly Publication—Subscription Free
Persons desiring this publication should address The Agricultural School, Hathorne, Mass.

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Marion P. Crawford, Homemaking Dept.
Harry A. Farrar, Agricultural Dept.
George E. Gifford, Agricultural Dept.
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Gladys E. Stratton, Home Demonstration.

Statement of ownership, management, etc., of the ESSEX FARMER AND HOMEMAKER, published at Hathorne, Mass., required by act of Aug. 24, 1912. Editor, Fred A. Smith, Hathorne, Mass. Publishers, Trustees of the Essex County Agricultural School, Hathorne, Mass. Owners, Citizens of Essex County, Mass. Known bondholders, mortgagees and other security holders, holding one per cent. or more of total amount of bonds, mortgages or other securities, none. No advertising revenue. Signed, Fred A. Smith, Business Manager, Hathorne, Mass.

Sworn and subscribed before me, this 3rd day of May, 1920.

ANDREW NICHOLS,
Notary Public.

(Seal)

EDITORIAL

With this number, the "Farmer" enters upon its second year of existence. This little publication, which was primarily authorized by the Trustees to serve as a calendar and reminder to the friends of the School and Farm Bureau departments, has apparently accomplished its mission. It has not been the intention of the editors to have this in any way supplant the regular existing agricultural or bulletin publications. It has been their effort, however, to make it a sort of medium of exchange or helpful bulletin passing between the School and its many friends.

The future of this publication is not outlined. It will undoubtedly need to expand to meet the ever-increasing needs of the various departments. Perhaps it will be necessary to make a nominal subscription charge. The whole matter is now up for consideration by Trustees and Advisory Committees.

May we explain that comments, suggestions and criticisms from our readers would be very helpful indeed.

MEMORIALS

Every graduate, former student, or friend of the School should reserve the afternoon of Sunday June 13 for the exercises at the School. A committee from the Alumni is cooperating with the Trustees in fittingly marking the services which were rendered by graduates, former and present students, in the World War. Suitable memorial markers are to be dedicated that day. It should be recalled that four men lost their lives in the great conflict. A beautiful memorial grove is also being planted in memory of

all who entered the service. This is bound to become one of the beautiful and attractive features of the School grounds.

Let everyone please remember the date and hour, 2.30 P. M., and thus honor our service men and women by their presence.

OUR GRADUATES

We are glad to call attention to the record of one of our first graduates from the Homemaking department, Lucinda D. Bousley of Salem, Mass. Miss Bousley entered the school in 1914, after attending the Salem High School for three years. She graduated



Miss Lucinda D. Bousley

from Essex Aggie in 1916, and at once entered the Training School of the Salem hospital, where for two years she was at the head of her class, receiving first honors for both years. When she graduated she received a special scholarship admitting her to the Boston School of Public Health, which is conducted under the management of Simmons College. She is planning to enter Simmons in June.

Since her graduation from the hospital, she has been doing private nursing and during the war, she was enrolled in the Army Nurses' Reserve Corps. She has been called back to Salem hospital to substitute three times, twice to take charge of the operating room and once as night supervisor. At present she is on private work in Hartford, Conn. Miss Bousley's record certainly proves her success and Essex Aggie is proud to claim her as an alumnae.

On the night of the Senior dance the Juniors gave the members of the Senior class a dinner in the dining room of the Homemaking department. The tables were tastefully decorated in yellow and white. The four course dinner was entirely prepared and served by Junior girls.

COMMITTEES OF THE ALUMNI

ASSOCIATION

Executive Committee

Melville G. Grey, Chairman.
Mildred C. Annan
Gordon F. Woodberry
Prince Woodberry

Memorial Committee

Charles B. Chapman, Chairman.
Mabel Curtis
Gilbert Tucker

ALUMNI NOTES

Everett L. Hall of Dover, N. H., a member of the Class of 1917, has sold the greater part of his farm, and expects to be located near North Andover this coming season.

Miss Ellen C. Rice (1918) is teaching at Hampton Institute, Hampton, Va., and would like to hear from some of her old classmates very much.

Saul Freedman (1917) is taking an active part in the student activities at Ohio State University, where he is a student. He is a lieutenant in the College Cadets, and also a candidate for the varsity football team.

Randolph Todd, 1918, is on the sales force of the International Harvester Co., in Somerville.

Gertrude McCormack, 1919, is a stenographer for a Brockton doctor. She is assisting him in laboratory work and in the operating room.

Marion Matthews, who has been doing student teaching while completing her course at the Plymouth, N. H., Normal School, will graduate in June, and will take a position as a high school domestic science teacher in the fall.

HOMEMAKING DEPARTMENT

The Extension Classes in Millinery have completed their unit of four lessons each. Twenty-six women took advantage of these courses, the towns and cities of Danvers, Hathorne, Salem, Lynn, Peabody, Middleton and Topsfield being represented. The lessons were given by Miss Simms of the Homemaking department and Miss Annan, Class of 1917, Essex Aggie.

On April first, the group of High School Specials enjoyed a trip to Boston, accompanied by Miss Crawford. In the morning, they visited the Girls' High School of Practical Arts in Roxbury. In the afternoon, they attended a meeting of the Eastern Arts Association. There they heard interesting lectures on "Textiles," "Building a Small House" and "Color in the Home."

Miss Helen Lewis, Class of 1920, recently gave a talk on Canning before the ladies of Boston Street M. E. church in Lynn.

With the Farm Bureau

CARE AND USE OF POULTRY MANURE

A large amount of experimental work has been done at the Massachusetts and Maine stations with regard to the proper care of poultry manure, in which they have found that more than one-half the nitrogen is lost under ordinary conditions. This may be prevented by the addition of chemical absorbents, such as Reid Phosphate.

The night droppings from a bird for a year averages 30 pounds, containing .8 pounds of nitrogen, .5 phosphoric acid and .25 pound potash, showing that it is a one-sided nitrogenous fertilizer.

The mechanical condition of poultry manure is poor, and is likely to be sticky when fresh and lumpy when dry. So it has been found advisable to add sawdust or dry loam to improve the mechanical condition.

A satisfactory mixture which will cause the retention of nitrogen and make a good mechanical composition, is as follows:

To 30 pounds of hen manure add 10 pounds of sawdust (dry loam or peat), 16 pounds of acid phosphate and (when it can be obtained) 8 pounds of kainit. This mixture when used at the rate of two tons per acre will furnish 50 pounds nitrogen, 185 pounds phosphoric acid and 80 pounds potash. Compare this with one ton of 4-8-4 commercial fertilizer which carries 80 pounds nitrogen, 160 pounds phosphoric acid and 80 pounds potash.

Have the sawdust and chemicals at hand so as to treat the droppings each day, as they are removed from the dropping boards. Shelter the manure in a shed or by keeping in boxes until you are ready to apply it.

If this method is followed, the poultry man can save a large fertilizer bill each year.

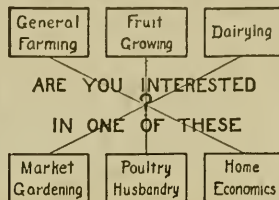
EUROPEAN CORN BORER QUARANTINE

A quarantine order relative to the European Corn Borer was adopted at a public hearing at Boston, April 5th.

Since the European Corn Borer has been found a dangerously injurious insect, so that it is likely to spread to other states through the movement of certain plants, a quarantine has been placed on the following crops within the restricted area: Corn, broom corn, celery, green beans in the pod, beets with tops, spinach, rhubarb, oat, rye and straw and certain cut flowers.

During this quarantine none of the vegetables listed can be shipped to any points outside.

1920 FARMER'S WEEK JULY 26-30 Incl.



~ THEN ~

Ask your county agent about the excursion that will go from this county to Amherst for Farmer's Week

Send a postal to-day asking to have your name put on the Special mailing list for a program~

~ EXTENSION SERVICE ~

Massachusetts Agricultural College
Amherst Mass

"AT YOUR SERVICE"

JUNIOR CLUB WORK

During the past two months, the Club members of Essex County have been doing good work. The Poultry and Home Economics Clubs are the only ones doing regular work at this season. The Poultry Club members numbering 240 are continuing their work, and some are having exceptionally good results. Example, one boy received six eggs from five hens in one day from his flock of R. I. hens.

The Poultry Clubs in the vicinity of Danvers are keeping up their good reputation in that kind of work, as are the Clubs in Amesbury, Gloucester and many other towns. At the present time there are organized clubs in Amesbury, Danvers, Gloucester, Haverhill, Ipswich, Methuen, Lynn, Newburyport, Saugus, North Andover and Salem. Most of these clubs have State Club Charters, as well as officers, and a few even have monthly dues.

The Home Economics Club members are finishing their work on May 1-13. There are 162 members enrolled and doing the required amount of work. Some of the clubs are being granted additional time in which to finish the contest. This was necessary because of the bad traveling conditions in the early part of the year, making meetings and demonstrations impossible.

The Amesbury Bread and Sewing

Clubs finished their work very early and had a fine exhibit on April 20th. The program was very fine, and practically every one of the 32 members took part in it. Miss Norris, State Home Economics Leader, judged the articles, which were very attractively arranged on tables in the Junior High School Hall. At this exhibit \$13 worth of thrift stamps were awarded to club members doing the best work. Mary Sillane made the best garments and Eleanor Williams made the best bread.

The Amesbury Club is one of the largest and best in the State, and will be awarded a "Banner" for having every member enrolled, complete the requirements.

Three individual workers in Newbury and West Newbury have completed the work. Helen Knight of West Newbury has made more than 150 loaves of bread besides spending more than 100 hours at housework since January 1st.

Bernice Mason of the same town has done fine work in sewing, making all her clothes and keeping house with the aid of her sister, who is also a club member in the Bread Club.

Mr. Farley, the State Club Leader, is due in Essex County for the week of May 2nd, at which time he and the County Club Leader will conduct an enrollment drive for members in the Pig, Garden, Potato, Canning and Small Fruit Clubs.

Mr. Howe, the Assistant State Club Leader, will assist the County Leader along the same lines of work during the week of May 9th.

Miss Norris, Leader of Home Economics and Canning Clubs, will judge exhibits of bread and sewing on May 16th, besides talking to members about the 1920 canning work.

EDWIN E. BERGSTROM.

SEASONABLE HINTS

Be sure to begin early, the canning of dandelions. They furnish necessary food material and cost little.

Save your sugar for local fruits. Don't use it to can fruit stand products.

Don't use last year's jar rings again. It is cheaper to buy new ones.

Don't be prejudiced against putting down eggs in water glass. There is no easier way of saving money.

The pupils of the Homemaking department are gaining a new and valuable experience in the order work recently started.

Food is being sold at Mr. Skilling's store and also on order.

SPRAYING THE APPLE

(Continued from page one)

For the "Calyx Spray" we have practically the same pests to control and, in addition, the codling moth, (which is the cause of wormy apples.) For this spray we may best use the same materials as recommended above, and they should be applied within ten days after the petals begin to fall.

If you experience any burning of the foliage in the use of lime-sulphur in the summer spray, it would be advisable to add to your spray a mixture of five pounds of lime before adding your arsenate of lead. Take five pounds of stone lime, shake in small amount of water, add more water, and strain into spray tank already half-filled with water and the lime sulphur, and then add your arsenate of lead. Fill tank, and keep spray material well agitated while spraying.

For best results, be sure and spray at the right time with the proper materials, and do a thorough job. Do not spray while the trees are in bloom, to do so will kill the bees which are one of the farmer's best friends.

FRUIT TREES SAVED BY BRIDGE GRAFTING

Essex County was very fortunate in being able to obtain, through the Massachusetts Agricultural College, the services of Mr. W. C. Holcomb, an expert fruit tree grafter of Isle La Mont, Vermont, to bridge-graft some of the mice injured trees.

Mr. Holcomb spent four days in this section and through his work many trees in various sections of the country will be saved. Along with his work, bridge-grafting demonstrations were held. In spite of the most unfavorable weather conditions, the demonstrations were well attended, and good results are sure to follow. Demonstrations were held at Mr. Nason's of North Andover, Dr. Crockett's of Ipswich, Essex County Agricultural School, and at the fine young nine-year-old apple orchard of Mr. Penny's of Saugus. At the latter place, in spite of the freezing weather, about 30 interested farmers were present and received valuable instructions. The damage by mice in this county has been tremendous. A small per cent. of these trees will be saved, but more will be lost, and now let us determine that next fall we will protect our trees from mice before winter sets in.

ANNOUNCEMENT

The Sixth Essex County Egg Laying and Breeding Contest will open October 10, 1920. Application for entry should be made early, as many were disappointed in being refused entry last year.

WATER GLASSING EGGS

About 60% of our yearly egg supply is produced in the months of March, April, May and June. Naturally the price of eggs is lowest during this season of high production. March, April and May eggs are lowest in price, with the low price coming at the last of April. It will pay you to "put down" one case, 30 dozen, for next winter at this time, and avoid the high winter prices for fresh eggs. Eggs can be kept in good condition for 10 to 12 months in water glass.

In order to obtain the best results, the eggs should be clean, fresh and infertile. Eggs of poor grade will deteriorate while in storage. Thin, cracked and porous shelled eggs do not preserve well in water glass and should not be used.

Earthenware crocks or wooden pails are the most satisfactory containers. They should be provided with close fitting covers to stop evaporation and keep the solution clean. Containers should be stored in a cellar where the sun will not strike them, and where the temperature never goes higher than 65 degrees. One gallon capacity will hold three dozen eggs with the proper solution.

Boil water several minutes to sterilize and then cool it. One quart of liquid water glass solution should be diluted with 10 quarts of the cooled water. A five-gallon crock will hold 15 dozen eggs and requires one quart of water glass.

POINTS TO REMEMBER IN PRESERVING EGGS

1. Scald the container.
2. Use 1-10 mixture.
3. Use only clean, fresh, strong-shelled, infertile eggs.
4. Be sure at all times there is two inches of water glass solution covering the top layer of eggs.
5. Keep a tight cover on container.
6. Keep jar in a cool place.
7. If solution evaporates add more sterilized water.

EGG LAYING CONTEST

The biddies are all in excellent condition in the contest and working at capacity. Our sixth summary report for the four weeks ending April 16th, shows an average egg production of 58.7 per cent., a gain of 13.0 per cent. over the previous four weeks. The leading breed was the S. C. White Leghorns, with a production of 61.4 per cent., and the Barred Rocks were second with 60.9 per cent. egg production.

Alder Brook Poultry Farm of Lancaster, White Leghorn No. 63 still

THE LESSER GROWN VEGETABLES

For those who desire to depart from the beaten track of vegetable growing, the Won Bok or Chinese Cabbage is a possibility. It is used as is cabbage and as a salad. In appearance it is very attractive. Try sowing the seed the 1st part of July.

Salsify or Vegetable Oyster produces a root which, when cooked as a stew or in form of croquettes, closely resembles its namesake, the shell-fish. To succeed with this vegetable, sow in April and thin to four inches apart as soon as up.

Celeriac or Turnip-Rooted Celery is desirable if one enjoys celery flavor in cookery. This vegetable is grown like celery except that it does not need blanching.

For the dandelion green enthusiast there is a similar vegetable, but milder in flavor in the broad leaved Endive or Escarolle.

Small pods of the Martynia are used in pickles. The flower is quite showy. Sow when the weather has become warm.

Leek is a mild form of onions with which Americans are but little acquainted.

Cos Lettuce stands the hot weather well and is popular with some who have overcome their prejudice in favor of butter head varieties.

A form of cabbage that, instead of a head, produces a turnip-like thickening of the stem above the ground is called Kohl-Rabi. The secret is to grow it rapidly and use it when about three inches in diameter before it becomes woody and only fit for stock feed.

For the best quality squash, plant Delicious.

Have you tried New Zealand Spinach? It produces abundantly during the hottest weather. Gather the ends of the shoots and more shoots will be produced.

The Spinach Beet or Swiss Chard is becoming more popular each year. Besides using the leaves as greens, the midrib or leaf stock may be cooked like asparagus.

leads the contest with a production to date of 117 eggs. She is closely trailed for first honors by White Rock, No. 142, owned by Applecrest Farm, Hampton Falls, N. H.

LEADING PENS TO DATE

First place is strongly held by Pen 14, Applecrest Farm White Rocks, with a total production of 826 eggs. Their Pen 32, R. I. Reds, is second, with 755 eggs, and Deer Brook Poultry Farm Pen 30, R. I. Reds, is third with a total production of 743 eggs

ESSEX FARMER AND HOME MAKER

Published Quarterly by the Essex County Agricultural School

Vol. 3

HATHORNE, MASS., JULY, 1921

No. 1



FARMERS' WEEK

JULY 26 - 29, 1921

INCLUSIVE

MASSACHUSETTS AGRICULTURAL COLLEGE.

FARMERS' WEEK CLOSE

The Annual Farmers' Week arranged by the Extension Service of the Massachusetts Agricultural College is to be held at Amherst, July 26th to 29th inclusive.

A very interesting program is in the making and has something of interest for every member of the family whether it be fruit, poultry, dairy, farm crops, homemaking, boys' and girls' club work or anything pertaining to rural life.

Several Essex County farmers have already expressed their intentions of attending this year and it is hoped that many more will make the same decision.

Laboratories will be open for inspection and instructors will be there to explain them and give demonstrations.

There will be lectures by men well versed in their subjects and an opportunity for discussions.

The program for the week has been outlined as follows:

Onion Growers—Tuesday, July 26th.

Fruit Growers—Tuesday and Wednesday, July 26th and 27th.

Poultrymen—Wednesday, Thursday and Friday, July 27th to 29th.

Dairymen—Production, Thursday, July 28th.

Plant Management—Friday, July 29th.

Vegetable Growers—Wednesday, July 27th.

Tobacco Growers—Friday, July 29th.

Breeders of Horses and Sheep—Wednesday, July 27th.

Breeders of Beef and Swine—Friday, July 29th.

SEASONABLE NOTES

During the summer period the project student gains his most real life experience.

There is no time like the summer months for the producer to make accurate records furnish valuable information.

During the dry periods of the growing season the dry farming methods need to be used.

With labor more plentiful, much constructive farm work, which has been put over for the past few years, may profitably be done.

When the world is settling back to pre-war conditions, there is an element of uncertainty in business, but the work of the food producer is in more uniform demand.

It may take a considerable time for efficiency to be fully recognized, but recognition is bound to follow.

Pyrox is a good commercial substitute for Bordeaux mixture, and if its use is demanded on a small scale only, it is worth while to avoid the inconvenience of home-mixing.

If Paris Green is used for Colorado potato beetles, care needs to be used to prevent burning by the free arsenic present.

Owners of white pine trees should be on the lookout for evidence of the blister rust, and if danger is acute take steps to secure eradication of currant and gooseberries.

Fruit growers suffered heavily from late spring frosts. This is an extra reason for careful thinning, and the best of care for fruit left. Heavily loaded trees should be propped early.

ASPARAGUS FIELD NOTES

The cutting season ends June 15 to July 1. The early date favors the future vigor of the plants.

From now until frost keep the asparagus bed growing vigorously by a generous supply of plant food, insect control and suppression of weeds.

This is an excellent time to supply plant food in form of manure or fertilizer, because now that the tops of the plants are allowed to expand in the sunshine the plants are able to digest it. Use 4 to 6 cords per acre of manure or 500 lbs. per acre of fertilizer.

Spray with arsenate of lead every 7-12 days or often enough to keep the old and new growth covered; for the purpose of controlling the two varieties of asparagus beetles.

Prevent weeds by frequent stirring of the soil. It is expensive to destroy tall weeds.

Unless your bed is covered with a jungle of dark green feathery tops, do not expect a heavy crop of shoots for cutting next spring because the shoots are produced from food stored in the roots this fall.

Asparagus also needs sweet soil. Use lime.

Rhubarb is like asparagus in that it must be well fed and allowed to make a heavy growth of tops after cutting ceases in order to continue to produce a heavy crop of stalks next spring.

When the plants begin to produce a large number of small stalks, dig up the roots and divide into four or more parts. Replant, supplying a liberal quantity of plant food and you will again have a crop of heavy stalks.

As soon as the plants die down is a good time to replant.

What to Plant July 1 and Later

Planting dates like time and tide wait for no man. Many have passed by for this year. The following suggestions are conservative: Under favorable circumstances, success may be had on later dates.

Sow Lettuce to July 15, Bush Beans to July 20, Beets to July 15, Carrots to July 4, Raddish to Sept. 1, Spinach Aug. 1 to Sept. 1, Swiss Chard to July 15, Rough Leaf Turnips to Aug. 1 or later, Celery Plants to July 20, Cabbage and Cauliflower July 1.

The last planting of lettuce should last a long time not going to seed and may be planted so to be covered with a cold frame or otherwise protected. Short types of carrots might succeed later than July 4.

A great deal depends on the weather.

(Continued on page 7)

ESSEX FARMER and HOME MAKER

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

A QUARTERLY PUBLICATION
SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

- July 26-29, Inclusive—Annual Farmers' Week at the Mass. Agricultural College, Amherst, Mass.
- August 2-5—Annual Conference of Agricultural Teachers of Massachusetts at the Bristol County School, Segreganset, Mass.
- Wednesday, August 3—Market Gardeners' Association of Boston Field Day at the Arlington Field Station.
- Saturday, August 13—Essex County Junior Club's Annual Field Day at Hathorne.
- Wednesday, August 17—Union Pomona Essex and Chebacco Field Day at the Essex County Agricultural School.
- Saturday, August 27—At 2 P. M., Poultry Field Day at Hathorne. Speakers—Prof. A. N. Richardson, N. H. State College; Prof. W. C. Monahan, Mass. Agricultural College. Everybody welcome. Come with your questions.

EDITORIALS

The staff of the School feel justly proud of the part which the School has played in the growing and dissemination of the new rust-proof asparagus. This is known as the Washington Strain. Many a farmer and gardener in the County secured his foundation stock of us in the spring of 1919. This year they have harvested the first crop. This crop has fully reached expectations and many have been the letters and telephone calls which have been received in praise of this new strain.

It is to be hoped that we will not stop here, but that many others will go on planting and increasing their plantings of this variety. The market is certainly far from over-supplied with this valuable vegetable.

The large enrollment for the new class which is to be admitted in September of this year is a matter of great satisfaction to the Trustees,



Essex "Aggie" Football Team, 1920

ATHLETIC ASSOCIATION

The pledges to the Athletic Association are due July 15th. Probably before another copy of the school paper reaches you this date will be passed. Therefore a reminder now is timely.

If everybody will make it a point to send in the amount of their pledge on that day it will save considerable time and expense to the Association.

Director and Staff of the School. In fact, it should be a matter of satisfaction to everyone.

Never has there been a time in the history of the country when serious-minded people realized the great importance of the present situation. More and more young men and women should be training themselves for the two standard vocations in life; namely agriculture and homemaking.

The School has already graduated a long list of students who are already demonstrating the wisdom on the part of the citizens of the county in establishing this School.

The number who have already applied for admission exceed ninety, and in a few days it is expected that this number will exceed one hundred. This, together with the students who are to return for advanced standing, will make an entire student body approaching three hundred. This is certainly a rapid growth and as large as is desirable in the face of the size of the present staff and School equipment.

A few sections of the county have not taken advantage of the opportunity as fully as they should have and the School authorities would like to co-operate and see that this oversight is corrected.

The School farm is proving each year to be more and more of a training ground and laboratory for the student body. This summer, a score of boys in the Agricultural Department and nearly half that number of students in the Homemaking Department are doing work at the School.

During the month of August we must place our orders for whatever new equipment is necessary. We should know before we order about how much money will be available.

Will each member of the Executive Committee please send his present address to the Treasurer of the Association as soon as possible?

FRANKLIN HAMMOND,
Treasurer.

These activities are scattered through the various departments and divisions. The experience and training which these students receive should be of great value to them and assist them very much in their later work.

The management of the School wishes here to express the appreciation of the work which has been done by the superintendents of the County, together with the teachers, in assisting us to find the students who should receive this kind of a training.

More and more have they showed a helpful spirit of criticism and co-operation in helping us advance the work. Co-operation between School authorities and parents can do a great deal toward sending us the right kind of applicants for enrollment in the School.

NEW INSTRUCTOR

George A. Meigs has been appointed instructor and joined the staff on May 16th. He was born on a farm in Vergennes, Vt., in the Champlain Valley, and is a graduate of the Agricultural College of the University of Vermont. He has also taken advanced work at the New York State College of Agriculture at Cornell University. For the past nine years, Mr. Meigs has been an instructor in Horticulture at the State College of Agriculture, Randolph Centre, Vermont. He will be primarily responsible for the teaching of fruit growing at the School.

EXTENSION SERVICE IN POULTRY

HENS MAKE RECORD for

First Six Months of Contest

The hens in the Egg Laying Contest at the Agricultural School have begun the second half of the year in a fashion that is very gratifying to their numerous owners and entirely satisfactory to the contest management. The general production so far this year has been much in advance of that of last year. To a great extent this may be accounted for by the fact that his contest began twenty days earlier than any of the previous competitions conducted during the past five years, and the birds took advantage of the very favorable October weather by making a splendid start.

The performance of the birds reflects credit upon the breeders, for the pullets were in excellent condition upon entering and it is quite evident that the contestants have profited by past experience in regard to the preparation and choice of their birds for contest work.

In reviewing the work for the past thirty weeks of the birds entered in this contest, the outstanding fact demonstrated is the high quality of the breeding stock in New England. The low death rate and the high average production of the stock sent here shows that stamina as well as productivity has been borne in mind by the breeders.

The hens so far have laid 28,759 eggs, and it is only fair to add that this is considerably in excess of the yield of last year up to this time or an average daily yield of 46 per cent. for the first seven months of the competition. This, together with the fact that the production has been, with the exception of only two weeks, higher than that at either the Connecticut or New Jersey contests, all of which is, of course, very gratifying to the owners who have sent their birds to this contest for the purpose of making high records.

The leading pens to date are as follows:

Pen 8—Wm. Clifford Peck, White Wyandottes, 1313 eggs.

Pen 29—W. Otis Day, R. I. Reds, 1225 eggs.

Pen 27—Deer Brook Poultry Farm, R. I. Reds, 1167 eggs.

Pen 5—F. M. Johnson, White Leghorns, 1134 eggs.

Pen 21—Robert Parkhurst, R. I. Reds, 1132 eggs.

Pen 13—Lewis L. Harrington, White Rocks, 1128 eggs.

Individual Egg Production

Of the 300 hens entered in the contest, there are 145 that have laid 100 eggs or over. The leader to date is White Wyandotte No. 87 from Wm.

Clifford Peck's pen. Her total record now stands 170 eggs. A Barred Plymouth Rock owned by Essex County Training School claims second place with a production of 164 eggs, but the margin of advantage is only slight for other individuals with high records are:

No. 293 owned by W. Otis Day, R. I. Red, 161 eggs.

No. 228 owned by Robert Parkhurst, R. I. Red, 160 eggs.

No. 132 owned by L. L. Harrington, White Rock, 142 eggs.

No. 57 owned by F. M. Johnson, White Leghorn, 142 eggs.

The accompanying table shows the total number of birds in each of the four principal breeds, the average number of eggs each hen in each breed has laid during the first six months:

No.	Breed	Eggs
60	White Leghorns	70.1
50	White Wyandottes	85.0
80	Plymouth Rocks	74.4
100	R. I. Reds	82.2

During the first thirty weeks of the contest the pens to receive first honors for the various weeks have been distributed as follows:

White Leghorns	5 weeks
White Wyandottes	14 weeks
Plymouth Rocks	9 weeks
R. I. Reds	4 weeks

The results obtained go to prove beyond question the capabilities of "right birds" and show that high production can be obtained through careful selection of breeders and through proper management.

FEEDING LAYING HENS

Table Shows Proper Amounts of Scratch Grain to Feed Hens for Each Month in Year

For the last two years we have been feeding the hens in the Essex County Egg Laying Contest, using the plan listed below with excellent results in egg production. We therefore feel prepared to recommend this table as a guide for the feeding of laying hens to the poultry keepers of Essex County.

We start the pullets on twelve pounds of scratch grain for November, December, January and February because we have found that during those months when they are developing their bodies and starting to lay, they need more solid foods which will stay with them longer than dry mash, during the long cold nights of winter. From the table you will observe that as the days get longer, the amount of scratch grain is gradually diminished. This causes the hens to increase their consumption of dry mash which contains the materials in a concentrated form for

egg production. During the very last of the summer, we lower the amounts of scratch grain fed very materially so that the hens are eating practically all mash. This forces them to a period of heavy production before they molt. By lowering the amount of scratch grain in this way, we have much less broodiness than before.

Scratch Graia Table

Months	lbs. per day	100 hens	lbs. A.M.	lbs. P.M.
November	13	5	8	
December	13	5	8	
January	13	5	8	
February	12	4	8	
March	10	4	6	
April	10	4	6	
May	10	4	6	
June	10	4	6	
July	8	3	5	
August	7	3	4	
September	6	2	4	
October	6	2	4	

POULTRY POINTERS

1. **Chicken Lice.** Hens that are used in brooding chicken are certain to have lice on them, and if they are infected, the chicken will be lousey. It is good insurance against lice at least to apply a small amount of vaseline to the top of the head of the young chicks. When the chicks get feathered out, anoint with a small amount of vaseline under each wing. Hen brooded chicken that do not grow and that have droopy appearance are usually affected with lice.

2. **Trays for Feeding Chicken.** After the chickens get to be 10 days old, you will find it advisable to supply them with some home-made feeding trays. These can easily be made from wooden boxes and should be three feet by one foot by four inches high. The edges should be half filled with growing mash and kept inside the brooder house and two of them outside to induce chicken to run out of doors. This type of hopper can be used for five or six weeks before a larger wooden hopper is furnished for the youngsters.

3. **Feeding Milk.** Milk in some form is one of the most essential feeds for starting young chicken. It is now being fed in several different forms; powdered milk, dried buttermilk, semi-solid buttermilk, fresh buttermilk and sour skim milk. When fed in the sour liquid form, you should use earthenware or glass founts, as the lactic acid in the milk acting on meal founts or pans, often causes some ill effects with the chickens. The lactic acid in the milk aids digestion and improves the appetite of the chicks, thus stimulating growth.

WITH THE COUNTY CLUB AGENT

A BUSY TIME IN CLUB WORK

This season of the year marks the close of the winter clubs. The Poultry Club is our most popular winter organization. It is not, strictly speaking, a winter club for the work of rearing the chicks is in the summer. However, the real work of the club is the winter egg laying contest, which ends June 1st. At this time the County Leader must visit each one of the poultry club members at their homes.

The standing of the poultry club member depends on the condition of the birds and houses on inspection by the club agent. I have found some very gratifying results from the club work in visiting the poultry plants of these boys and girls. There is a great interest shown, manifesting itself in lots of small chicks coming along, clean coops, and full feed and water dishes.

The Home Economics Clubs are also at an end. The grand finale for this work is the exhibit. The girls arrange samples of their baking and needlecraft in some public place, as their school room. Parents and friends are invited to inspect the results of the work after a judge has placed the awards. A great deal of good natured rivalry reaches its end at this exhibit when a perfectly neutral judge pronounces the first, second and third prize winners. Some wonderful work has been done by our sewing club girls; careful hemstitching done by hand, button holes with the edges worked perfectly, and stockings darned with even weaving and smooth finish. The bread club members showed samples of their baking; big brown loaves of bread that revealed a porous, white interior when sliced; golden muffins, light and tasty and biscuits that spoke of careful mixing and baking.

The winter clubs are over officially but we hope that they will never be over in the hearts of the boys and girls who have enjoyed their benefits.

THE SUMMER CLUBS

A Chance for Boys and Girls to Keep Together This Summer

"Going to have a garden?" I asked a small boy. "Sure thing," he said. "Father always does." "Well," I continued, "why not sign up with the Garden Club and get the letters and go on picnics with the other fellows and do your work in your fathers garden?" He hesitated. "Maybe he won't let me." "Won't let you?" I asked. "Why not, I want to know." Finally he agreed to take a card and see what Dad thought of it. I called at his school a couple of days later,

and, sure enough, there was his application card with Dad's signature of approval at the bottom.

That is the way many of the garden club members get a start. Never thought of doing the work before. Dad is usually willing sonny should take care of the garden, providing sonny will get results.

The Canning Clubs are shaping up now for their summer of fun and work. The girls or boys in this work depend a great deal for their success upon their Local Leader, who is the backbone of each club. A good Local Leader spells Success to his or her club.

Small Fruit Clubs are a new idea and as yet the response has been mild but I hope next year to have a large enrollment.

PROGRAM, JUNIOR FIELD DAY AT ESSEX COUNTY AGRICULTURAL SCHOOL, HATHORNE, MASS.

Saturday, August 13th, 1921—9.00-9.45, Registration and Assembly; 9.45-10.15, Speaking; 10.15-12.00, Agricultural and Home Economics Contests, demonstrations and events; 12.00-12.30, Lunch; 12.30-1.00, Singing and Yells; 1.00-1.30, Exhibition Work and Drills by Boy Scouts and Campfire Girls; 1.30-4.00, Sports and Contests.

S. W. DEQUOY,
County Club Leader.

MY CHOICE

I choose the Country because God made it more beautiful than the city.

I choose to live my life in the open in contact with nature because it is the natural life for man.

I choose to work with nature because it is more inspiring than work with machinery.

I choose to stay on the farm because I believe that life is grander and much happier on the farm than in the crowded city, and that my success depends upon myself and not upon where I happen to be.

I choose to be a farmer because I want to care for animals and plants and really produce things worth while.

SCHOOL OF RURAL HOME LIFE

As announced in the calendar of this issue, a School of Rural Home Life will be held at M. A. C., Amherst, Mass., July 18th to 25th. This school offers to mothers, community workers and teachers the opportunity to study some of the problems of the home and community. Courses in Food Preservation, Vegetable Gardening and Poultry will be offered together with practical courses in Home Economics. There is no charge for tuition. Board may be had for about \$7.00 per week.

A POULTRY CLUB SUCCESS

Hugh Parkhurst Found Poultry a Paying Proposition

The County Club Agent in 1918 found Hugh Parkhurst keeping a few hens in the good old-fashioned way to pick up a little spare money. The new methods of poultry keeping were a curiosity to Hugh and he took a great interest in club work. Now, in the third year of his membership in the Poultry Club, he is an honest-to-goodness, dyed-in-the-wool, 16-hour-a-day poultryman.

I visited the poultry plant the other day which Hugh and his business partner are operating. Talk about chickens! The place is alive with them. I said to Hugh: "How many chicks do you reckon you have?" "Well," he replied, "According to our brooding records and subtracting the mortality list, we must come pretty near the two thousand mark."

A business venture is this plant of Parkhurst's. He has an equal part in the work and management of this poultry business. They hatched these chicks in small machines, buying the eggs from plants where they know conditions to be good. The chicks were brooded in coal stove brooders which would take care of two hundred at a time.

The idea of marketing used on this plant is good and practical. Catering to a fancy, fussy trade is their idea. The partners have drummed up a trade with private houses and with hotels. They plan to have the most of the cockerel dressed off as soon as they reach the broiler stage. This, of course, gives a quick return and gives more room for the pullets to range over. They are also buying up some fowl for the summer trade in fricassee stock. The deliveries will be made by auto and by parcel post.

The plant consists of four colony houses, each twelve feet square. These, with a dozen small coops, will house the birds until maturity. The laying quarters consist of two long houses, each twenty feet deep, which will be filled with six hundred of the best pullets this fall.

Hugh Parkhurst has found the Poultry Club a very helpful organization and by coupling it with his poultry education gained at the Essex County Agricultural School, he has picked out a man-sized job and seems well able to swing it.

Rooms cost from \$2.00 to \$3.50 per week. For further information regarding the School of Rural Home Life address

MR. JOHN PHELAN,
Director of Short Courses
Massachusetts Agricultural College.

WITH THE COUNTY AGRICULTURAL AGENT

SPRAY POTATOES TO PREVENT LATE BLIGHT

Is it important to insure your buildings against fire? It is of far more importance to spray your potatoes to prevent late blight because the disease strikes potatoes more often than destructive fire visits your buildings.

Many farmers think that if they put a coat of poison on the potato vines to kill the bugs nothing else is necessary. However, a little later, when the vines begin to show black spots and die, with rot of tubers as a result, the value of a preventative is without question.

Potato vines should be sprayed with a good home-mixed solution of Bordeaux mixture when they are six inches high and every week or ten days thereafter until they naturally die. The commercial mixtures are not as good and they cost a great deal more.

Plan now to spray if you can have access to any kind of a pressure pump: 5 pounds of blue vitrol and 5 pounds of lump lime are all the ingredients necessary to spray an acre once. The cost is about 65c. If there are any bugs, use 2 pounds dry arsenate of lead in the solution or 4 pounds of the paste.

Bordeaux mixture is of very little value unless the ingredients are properly put together.

The best method of mixing is to have two barrels on a platform which is just level with the top of the sprayer. Dissolve 5 pounds of blue vitrol in 25 gallons of water in one barrel by suspending a bag containing the blue vitrol so that it does not touch on the sides or bottom of the barrel. In the other barrel, slake 5 pounds of lump lime and add water to make up 25 gallons. Back the sprayer to the edge of the platform and allow the contents of both barrels to run into the sprayer simultaneously by means of a short piece of hose from each one.

If you cannot prepare to mix by the above method, the next best way is to prepare stock solutions of blue vitrol and lime in separate barrels in the proportion of 1 pound of lime to 1 gallon water and 1 pound blue vitrol to 1 gallon water. When ready to apply, fill the 50 gallon sprayer to within 10 gallons of the top, then stir the blue vitrol solution thoroughly, dip out 5 gallons and pour into the sprayer. Stir the lime solution and add 5 gallons to the contents of the sprayer. Be sure to always add the blue vitrol solution first, and then the lime.

If you desire to mix this in smaller quantities, use the same proportions and methods.

HOME-MIXED FERTILIZER

On account of the high price of commercial fertilizer and the comparatively low price of the fertilizer ingredients, several of the Essex County farmers have mixed their own for the first time. A saving of about \$15.00 per ton has been saved on a 4-8-4 brand by mixing at home.

A popular formula used for a 4-8-4 is as follows: 100 lbs. Nitrate of Soda, 100 lbs. Sulphate of Ammonia, 400 lbs. Tankage (10-10), 900 lbs. Acid Phosphate, 150 lbs. Muriate of Potash. While this makes only 1650 lbs. of material, it contains the same amount of plant food as a ton of commercial 4-8-4.

At one of the mixing demonstrations held in the county, the materials for a ton were easily mixed in an hour and a quarter.

Should there be as great a saving next year by home-mixing as there has been this year, there is no question but what many more farmers will take advantage of it.

AYRSHIRE BREEDERS PROCURE ANIMALS

Several Ayrshire breeders from Essex County attended the National Ayrshire Breeders' Annual Meeting and Sale at Springfield, June 7th and 8th. There were about eighty fine individuals, mostly females, sold at auction.

From among the lot four cows and two calves were brought into Essex County.

A. H. Cole of the Lawrence Farm, Topsfield, Mass., secured a 10,000 lb. cow from John Hannah, Brownsville, Vt.; also two other finely bred individuals, one of Finlayston and the other of Hobbsland breeding.

George L. Averill of Andover bought a two-year-old heifer, Nancy Mae of Cream Ridge, from W. V. Probasco, Cream Ridge, N. Y. She is well bred and a beautiful individual. Since Mr. Averill purchased her, she has dropped a fine bull calf.

MARKET NEWS ITEM

The State Division of Markets, Boston, Massachusetts, issues a weekly circular quoting Boston Retail Prices actually collected from the various types of retail stores, including range of prices on fruits and vegetables, dairy, meat and fish products; indicating weekly demand for certain commodities, and what is new on the market. A paragraph is also devoted to brief market news items covering crop outlook, predicted shipments and food supply, ending with a new re-

ESSEX TO HAVE FIVE POTATO DEMONSTRATIONS

Is there any profit in raising potatoes? What are the best methods to use? These are two questions which the Extension Service and farmers in the county are trying to solve by actual demonstrations.

A contract is drawn up by the farmer who carries the demonstration and the County Agent, in which the farmer states that he will treat his seed with corrosive sublimate, green the seed for about two weeks before planting, spray with home-made Bordeaux mixture as often as necessary during the season, and keep a strict record of his costs, time, rent of land, etc.

Meetings have been held at these demonstration plots where the methods of mixing spray, treating seed, cutting seed, and other operations were described or shown by actual demonstration.

The practices used on these plots are very near identical with those used in Aroostook County and should prove both of interest and value.

HOME-MADE SILOS

Arrangements have been made in three communities of the county to build home-made silos as a demonstration, where all visitors can see exactly how they are constructed and obtain figures of the cost.

A saving of from \$150 to \$200 will probably be made on each silo over what it would cost to buy the same size silo ready-made.

Specifications of necessary material, and instructions as to preparing it will be supplied from the Extension office to anyone who plans to build. A few more demonstration silos may be planned if there are other communities interested.

Three of these silos may be seen in the county as they were built last fall, viz: A. F. Tenney's, Linebrook Road, Ipswich; C. E. Stillings, Saugus; and Double B. Farms, Methuen.

cipe in season or a practical, economical suggestion.

The report is used quite extensively among owners of roadside markets and others interested in the selling of farm products, as well as retailers and consumers living in and around Boston.

This report is available at the Massachusetts Department of Agriculture, and all persons desiring it kindly send name and address and 50c to cover cost of postage for one year to the Division of Markets, 136 State House, Boston, Mass.

WITH THE HOME DEMONSTRATION AGENT

EXTENSION CLASSES

The Extension Classes in Clothing, including dressmaking and millinery, will close during May. The demand for these classes is becoming so great that, in order that the work may be fairly divided in the county, we are asking all local leaders or town chairmen who apply for these classes to fill out an application blank. These applications will be filled as nearly as possible according to date filed, after considering the number of classes previously given both in this community and to this group. Some towns have had very little or no class work, while others have had a considerable amount.

It seems only fair that when a town or community that has had but little previous work, applies for these classes, this request should have first consideration.

During the three months of February, March and April, the Extension Service in Home Economics arranged for 207 classes. These classes were enrolled with from 12 to 16 members. We have had an average attendance of 13.68 persons.

FORM A STUDY GROUP IN NUTRITION

Have a woman, who is willing to act as local leader, apply to your town chairman in Home Economics for a course in nutrition. If you do not know who your town chairman is, apply directly to Miss Alice J. Bunce, County Home Demonstration Agent, Essex County Agricultural School, Hathorne, Mass.

Miss Bunce will come and explain the course to the group and will help with outlines and reference books. In order to make this a real study class, text books are needed by individual students.

NUTRITION AND SANITATION PROGRAM

For the Pomona Grange held at West Newbury on May 5th, the Home Demonstration Agent was asked to arrange a program showing the kind of work she wished to emphasize during the coming year.

The morning speaker was Mr. Frank A. Manny, a Nutrition expert, whose work is with Dr. Emerson's Nutrition Clinics for Delicate Children. In the afternoon Dr. Simpson, representative of the State Board of Health, gave an illustrated lecture on Rural Hygiene.

Miss Bunce told those present how classes might be formed to study the subjects of Health and Nutrition.

As a direct result of this meeting, one child who had been intelligently cared for at home and who, after local medical examination and advice,

had continued to be a delicate child, was placed under the care of Dr. Emerson's Clinic, and has already had the first very thorough examination at the Massachusetts General Hospital in Boston.

IS THERE A "BETTY" IN YOUR HOME?

For years the thing that bothered women in making their own dresses was the difficulty encountered in getting the garment properly fitted. They had to take some one's word for it usually, or if they went to a dress-maker they were obliged to have several try-ons, and this took time that should have been used for other things.

Then came "Betty." The home demonstration agents sent out by the State Agricultural colleges, in co-operation with the United States Department of Agriculture, introduced Betty to thousands of farm homes, and also to other thousands in towns and cities. Betty is a dress form made of strips of gummed paper tape moulded on the figure over a tight-fitting undervest. This home-made form is, naturally, an exact replica of the figure.

The idea was instantly popular. Every state in the Union has Betties by the hundreds, and the reports received by the Department of Agriculture show they have not only saved money for the owners, but they have caused women and girls to see themselves as others see them, to straighten up, to stand with the shoulders back, to avoid the slouchy attitudes too common among human beings. "Well," exclaimed a large fat woman in a group, "that's the first time I ever saw my back as it really is."

DO YOU KNOW?

Do you know why a bread, potato, meat and sugar diet is inadequate?

Do you know why this diet as listed above is not safe for even a majority of our meals?

Do you know that many American families depend, for a large proportion of their diet, on the above foods?

Do you know what foods are most commonly lacking or used in too small amounts for our health and efficiency?

Do you know what foods are most commonly used in too large amounts by the average family?

Do you know what additions to the milk diet should be made between the first and third years?

Do you know what the essential changes in diet are between the ages of three and eight years—between the ages of eight and twelve years?

CANNING

Do you know a group of women who wish to have a discussion or demonstration on canning?

So much has been done in this work during the war and so much has been written and published on this subject, that we are undecided as to how much of this work is needed. We are glad to take it up in any community where there are enough interested women to send us a request for this help.

Steps in Canning

1. See that water, heat and all equipment are ready before starting.
2. Clean, test and heat jars and other containers.
3. Select only, fresh, firm, sound products.
4. Clean, grade, pare, slice, or otherwise prepare.
5. Scald, blanch or steam.
6. Dip quickly into cold water. Omit 5 and 6 for soft fruits and berries.
7. Pack at once in hot clean containers.
8. Pour over fruit, boiling water or hot thin syrup, over vegetables boiling water, and add one teaspoon of salt per quart.
9. Wipe around top of jars with clean cloth before placing rubber.
10. Place scalded rubber and cap in position at once.
11. Partially tighten tops on jars.
12. Sterilize required time; count time when water begins to jump.
13. Remove from canner; seal completely; invert to test joints for pin-hole leaks.
14. Cool glass jars as quickly as possible, avoid drafts.
15. Label, wrap and store for winter use.

Do you know what kind of food should be given the girl between the ages of twelve and twenty years?

Do you know how much food the boy needs who is between the ages of twelve and twenty years?

Do you know four vegetables especially rich in iron?

Do you know that this iron is better for you than any you can buy at a drug store?

Have you children or members in your family of any of these ages mentioned?

Are you satisfied to feed them without this knowledge?

Does the up-to-date farmer take these chances with his live-stock or even his poultry?

ALUMNI DIRECTORY

Class of 1916

Agricultural Department

Abbott, William J., Farm Supt.
Lancaster, N. H.
Bascom, A. Everett, Chauffeur,
care Mrs. L. C. Fenno, Rowley.
Bates, W. Page, Shoecutter,
Hathorne.
Bradstreet, Horton D., Farmer,
Topsfield.
Burnham, Bradford T., Landscape
Gardener,
Belcher St., Essex.
Chapman, Charles B., Clerk,
18 Green St., Marblehead.
Condon, Roy, Farmer,
Lowell St., West Peabody.
Croughwell, Frank J., Dairy Farmer,
West Peabody.
Harris, Fred P., Carpenter,
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Hussey, Ralph D., Farmer,
169 Elliott St., Danvers.
Jenkins, Ralph T., Bank Teller,
First National Bank, Skowhegan,
Me.
Killam, Paul T., Farmer,
East Boxford.
Kondrup, Hans C., Farmer,
Box 209, Wakefield.
Martin Luther, Farmer,
22 Pond St., Marblehead.
McInerney, Alfred E., Market Gard-
ener,
15 Center St., Danvers.
Olsson, Olaf A., Dye Salesman-Re-
porter,
172 Wilson St., Nahant.
Poirier, Victor S.,
3 Holly St., Salem.

Prime, Elliott C.,
Central St., Rowley.
Rice, Ellen C.,
Lancaster.
Snow, Donald A., Orchardist,
12 Fram Road, Marlboro.
Stanton, Carl, Estate Supt.,
Box 414, Falmouth, Mass.
Sudbury, James, Auto Salesman,
5 Prospect St., Gloucester.
Sweeney, Patrick E., Estate Manager,
Essex Co. Golf Club, Manchester.
True, Fred L., Clerk,
Ropes Drug Co., Beverly.
Woodberry, Prince, Cashier Tydol
Co.,
25 Cross St., Beverly.

Homemaking Department

Bent, Mary E., Bookkeeper,
Middleton.
Bousley, Lucinda, Nurse,
District Nurse, Norwich, Conn.
Burbeck, Ruth (Mrs. Ernest B. Frey),
140 University Ave., Buffalo, N. Y.
Mathews, Marion E., Teacher Domes-
tic Science,
Meredith, N. H.
McCormick, Edith (Mrs. Edith Bald-
win),
33 Prescott St., Everett.
Palmer, Elizabeth O. (Mrs. Robert
Little),
171 Lowell St., Peabody.
Stetson, Elinor, Clerk,
17 Spofford Ave., Georgetown.
Wood, Margaret (Mrs. Kenneth Tut-
tle),
"Ledgemonte," Warren.

SOME OF OUR BETTER PROJECTS

Elbridge S. Allen, 8 Bailey St.,
E. Lynn, with F. H. Foster, Andover,
Poultry; Eric Bergstrom, 150 Jen-
ness St., Lynn, at home, Floriculture;
Paul Brickett, 58 Wall St., W. Lynn,
with Elmercroft Poultry Farm, Lowell
St., W. Peabody, Poultry; Thomas P.
Colleary, 96 Park Ave., Andover, Ha-
thorne, Poultry; Alden F. Cressy, 33
Lathrop St., Beverly, at 40 Stone St.,
Beverly, Poultry; James Duncan, 9
Addison St., Gloucester, with Dr.
Phippen, Washington Sq., Salem, Flori-
culture and Vegetable Garden-
ing; Roger P. Gray, 18 Smith
St., Marblehead, with Sorosis
Farm, Marblehead, M. Animals;
Ralph L. Hanners, 7 Cedar St., Beve-
rly, with Turner Hill Farm, Ipswich,
Fruit; Wallace Henderson, 64 Red
Spring Rd., Andover, at home, Vege-
table Garden; Herman F. Herrick, 22
Judson St., Beverly, at School, Flori-
culture; Alfred Jackson, Parker St.,
No. Andover, with Edgewood Farm,
N. Andover, Dairying; Everett A.
Jones, 43 Charnock St., Beverly, with
Russell Farm, Merrimack St., Methuen,
Dairying; Wilfred Jordan, 11 Lafayette
St., Ipswich, with Ahl Estate, Ham-
ilton, Vegetable Garden; Gerald L.
Knightly, 173 Pleasant Valley St., Me-
thuen, at home, Poultry; Philip A.
Lee, 21 Arlington Ave., Beverly, with
F. M. Johnson, Waldboro, Me., Poul-
try; Ned Sherman Leland, 29 Glidden
St., Beverly, with Southworth Bros.,
Nurseries; Norman M. Libby, 69
Pleasant St., Everett, at Amity,
Maine, Farm Crops; John E. Lombard,
20 Pleasant St., Everett, with D. H.
Thomas Farm, East St., Ipswich,
Poultry; J. Raymond Lord, W. San-
ford, at School, Dairying; Wallace
Moreland, 9 Fairmont St., Salem, with
Egg Laying Contest, Vineland, N. J.,
Poultry; Hugh Parkhurst, 158 Essex
St., Gloucester, with Essex Co. Poul-
try Co., Hathorne, Poultry; Alton G.
Perkins, 87 Oakwood Ave., East Lynn,
at School, Poultry; Carl D. Phipps, 68
Hamilton Ave., Lynn, with Conn. Val-
ley Orchard Co., Westminster, Vt.,
Fruit; Robert Pollock, 6 Foster St.,
Salem, with Walter Boice Farm, No.
Andover, Dairying; Maxwell S. Rob-
erts, Newbury, with Montgomery Pk.,
Newbury, Gen. Farming; James Rog-
ers, 80 Park St., Lynn, with H. A.
Wilson, Hollis, N. H., Poultry; Ever-
ett A. Russell, 478 Merrimack St., Me-
thuen, at home, Dairying; Marion
Severance, 41 Severance St., East
Lynn; Raymond Stevens, 17 Bald-
win Rd., Marblehead, at Village
St., Marblehead, Market Garden-
ing; W. W. Stevens, 4 Neptune St.,
Vt., at home, Farm Mgr., and
Dairying; George A. Woodman,
104 Pine Grove Ave., Lynn, with Ed-
win Smith, Hadley, Dairying.

CHANGE IN EXTENSION SER- VICE STAFF

Stanley W. DeQuoy, a graduate of
this School, of the Class of 1917, has
been appointed County Club Agent.
Mr. DeQuoy is an enthusiastic worker
and in past years has been a success-
ful club winner in many contests. He
takes up the work with the best wish-
es of his friends, classmates and staff.

A VALUABLE BULLETIN

Farmers Bulletin No. 1169 entitled
"Insects Injurious to Deciduous Shade
Trees and Their Control," has just
appeared. This is a publication which
should be in the hands of all who own
and care for ornamental trees. The
arrangement and subject matter is
very clear and concise. A copy may
be obtained by addressing Division of
Publications, United States Depart-
ment of Agriculture, Washington, D.
C.

Robert Pollock is giving excellent
satisfaction on Walter Boyce's farm
in North Andover. He is a real team-
ster. Some of you should drop in to
see him at milking time. Can he
milk? Just visit him and see.

MARKET GARDEN FIELD DAY

Essex County Gardeners' Tour

The date of August 3 should be set
aside as a red letter day by all mar-
ket gardeners who are interested in
the experiments being carried out at
the Field Station at Lexington.

Plans are being made for an au-
tomobile tour from Essex County to
Lexington on that date, visiting a few
farms on the way.

August 3 has been chosen because
of the fact that they are having a
field day program at the station and
some special attractions are being
prepared.

Details of the tour will be published
later.

ASPARAGUS FIELD NOTES

(Continued from page 1)

er furnished us. In 1920 beets and
carrots sown for fall and winter use
were overgrown before time to store.

Many late planting of vegetables
were a great success that would have
been frozen other years.

Take a chance. Plant early in spring
and late in summer if the land is loaf-
ing (vacant).



A Lesson in Bread Making

HOMEMAKING DEPARTMENT

The students in the Homemaking Department are now busy planning their Summer Projects. The Projects vary according to the needs in the home and home conditions. For those who wish to earn money during the vacation, an effort is made to find a suitable project with a definite money value. The following list of projects will show the variety of work which may be done by the students:

Home Canning.

Commercial Canning.

Apprentice in Millinery Shop.

Entire "Care of House" for a definite period, reporting menus, cost of material, time spent, mother's estimate.

Waitress at Summer Hotel.

Mother's Helper.

Assistant in Dressmaking Shop.

Training at North Shore Babies' Hospital.

Clothing outfit for pupil—dress, skirt, hat, camisole.

Clothing outfit for child—dress, bloomers, slip, nightgown.

Salesgirl at Essex Aggie Vegetable Booth.

Alumni Elizabeth Brown, H. S., Special 1920, is training at the North Shore Babies' Hospital.

A victrola cabinet has just been purchased by students of the Homemaking Department.

Seven of the students in the Homemaking Department have just completed their classes in Sewing and Cooking in connection with the Junior Club Work.

Five of the Teachers of the Homemaking Department go to Hyannis this Summer for the course given to teachers of Household Arts under the direction of Miss Anna A. Kloss, State Agent for Teacher Training.

Members of the Junior Class visited the American Woolen Co. Mills at Lawrence recently in connection with their course in Textiles.

The Class in Houseplanning visited the House Beautiful Exposition and also made a trip to Salem stores to obtain prices for home furnishings.

MOTHER'S DAY

Mother's Day was observed May 20th. The weather was all that could be desired, and Essex Aggie looked its best.

The morning exercises, to which all Mothers were invited, was held in the Assembly Hall of the Homemaking Department. "A Scene in a Village Emporium," given by the students of the "High School Special" group, brought out points in economical marketing. A bread demonstration and singing by the School and the Glee Club completed the program for the morning.

A luncheon, prepared by the students, was served to about 150 guests and students.

On account of the size of the audience the afternoon program, open to the public, was held in the Assembly Hall in the main building. Before the regular program began, "A Galantry Schottish" and School March were given on lawn.

"A Scene from the Vogue Shop" gave the Seniors an opportunity to show what they had learned in Sewing, Costume Design and Textiles.

Short addresses were given by Mr. F. A. Smith, Director, and Miss Anna Kloss, State Agent. Mrs. Irving O. Palmer completed the afternoon program with a fine talk on "The Hope Chest or Preparing for Life."

Interesting Exhibits were shown in Sewing, Millinery, Cooking, Houseplanning and Academic Subjects.

AGRICULTURAL DEPT.

June 21, 1921.

Dear Students:

The idea of writing a letter to students on project was suggested to me by Wallace Moreland, now working at the Egg Laying Contest at Vineland, N. J. Moreland did mention something about going into the Merchant Marine, but that Vineland place turned up just in time so save Wallace from what might have been a watery grave. Can you imagine Moreland "hoisting" an anchor? No, but

perhaps you can imagine him trap nesting or running the incubators.

Many of you fellows have been on project a month already. Just look back over the month. Are you satisfied with your work? You have the opportunity now to put your training into actual practice and as teachers, we have every confidence that you will succeed.

The boys now on project at the School are Barnes and A. Perkins in the Poultry Division; Ives and Anderson are taking care of the large and small fruits, while James Lord is doing well in the Dairy Division. Williams has charge of the small animals. "Bob" Ewing is doing excellent work with the boys on the Market garden. Some of the 1's working with "Bob" are O'Keefe, MacCracken, Prescott, Wolfgram, Fossa and Brown. Oulton is also working in this division, having charge of the crop records. "Hank" Herrick is now in Mr. Wilson's division, working on the School grounds.

In another column you will find just where some of the boys are located. We hope this little paper reaches every member of the School and that it may be the means of reminding you that we are looking to you for a successful project.

Sincerely yours,

G. E. GIFFORD.

"With the Students"

James N. Skinner of Marblehead is carrying a fine type of home project. It consists of a vegetable garden; large and small fruits; two hives of bees; 200 chicks; 23 Pekin ducks; 30 R. I. Reds, also dahlia and gladiola gardens. Besides caring for these, James will build a poultry house for 100 pullets and make several extensive improvements on the grounds about the house.

Jordan, the freshman class president, has a real job at the Ahl estate in Hamilton. During the four weeks that the foreman was out sick, Jordan made good by directing several men in the garden and farm work.

Eric Bergstrom is continuing a greenhouse project which his elder brother Edwin started while he was a student at the School. Eric has raised several thousand plants and flowers which are now finding a ready sale in his section of Lynn.

You would all be interested in Gerald Knightly's project. He has built two good colony houses and is raising about 500 chickens. The great improvement during the season in the care of his chickens has been very noticeable.

Wallace Henderson has a real man-sized job. He has a market garden of over two acres and the greater part of his land is two miles from his home. It is an everyday occurrence for him to work from 12 to 14 hours. How many of you are working as earnestly?

ESSEX FARMER AND HOME MAKER

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Vol. 3

HATHORNE, MASS., OCTOBER, 1921

No. 2



Pictures Showing Essex "Aggie" School Exhibits at Topsfield Fair.

AGRICULTURAL FAIRS

The Fairs of Essex County for 1921 are rapidly becoming memories. They should be pondered over, however, with the idea in mind to see if we are making progress or simply marking time.

Lynn Fair

The Greater Lynn Fair, while it has been good in times past, exceeded any past record it has made for itself by a wide margin. The Lynn Fair has the distinction this year of having its exhibitors win both the Silver and Bronze Medals, which are awarded by the State Department of Agriculture to exhibitors whose exhibits show the best agricultural development. The Silver Medal was awarded on a young Jersey herd and the Bronze Medal on swine. A very large crowd greeted Governor Cox Thursday evening. The Governor spoke very fittingly on the "Importance of Agriculture in Relation to City Life."

The poultry exhibits were exceptionally diversified and complete. The department merited and received a perfect scoring by the State Department of Agriculture. There were several exhibits of the rarer breeds. Pigeons and rabbits vied with the poultry in breeds and strains. There were especially fine exhibits of dahlias and gladioli, both competitive and commercial. A very attractive flower garden formed the center of the tent.

In the dairy tent there was as fine a quality of Holsteins and Guernseys and as good blood lines in Ayrshires and Jerseys as there are in the State. The livestock exhibits were scored seven out of a possible eight by the State Department. The sheep and swine exhibits were also of high quality.

The outdoor show ring drew a crowd bent on seeing some of the best blooded animals in the different saddle classes.

The fruit and vegetable tent contained some very fine displays. One man had one hundred and forty-seven varieties in his exhibit.

Little attention is usually paid to the health of our communities, but Lynn Fair is to be complimented for placing so much emphasis on this extremely worth-while feature.

The exhibits of fancy articles were many and extremely varied. Some were very unique, others very old, and all showed painstaking care.

Topsfield Fair

The Essex County Agricultural Society held its 100th annual fair under very auspicious circumstances. Valuable additions were made to the grounds during the summer; among them a new exhibition shed, a new water supply, and a one-half mile race track. The management is certainly to be congratulated for the wonderful results obtained. Comments like "Such splendid exhibits," "Isn't this just grand," and "It's the best ever," or "Say, Essex County has got a bunch of pure bred herds," were to be heard on all sides.

The new exhibition shed, which is a little to one side of the main entrance, held the eight splendid Grange exhibits, the Topsfield Grange winning the coveted blue ribbon. The key note of the Essex County Agricultural School exhibit was Economy. Their exhibit, while not featuring all the activities of the School, gave people a clear idea of the splendid work being done at the School in the service of the County. There were fine vege-

(Continued on page 7)

HARVESTING AND STORING VEGETABLES

Some classes of vegetables, as potatoes, are harvested at one time; that is, the whole crop from a field is removed the same day. Other crops, as tomatoes and melons, are not all ripe at the same time; while beets may be left in the field for days until the market conditions are right for maximum prices.

Promptness is of the greatest importance in harvesting the most perishable crops.

Organization of men in the field is also very important. Usually it is best to assign each man to certain rows and then check them up often on quality and amount of work done.

A great many different methods are used in collecting crops, and the method used not only depends on the bulkiness of the crop, but upon whether the crop is to be stored or marketed at once. A bulky crop, such as cabbage, which is to be marketed at once, is often placed on the wagons immediately after cutting and hauled to market without further handling. Crops that need washing and further preparation should be taken in baskets and boxes to the packing sheds where they are made ready for market.

There are some rather definite ideas in the minds of gardeners as to how to care and store vegetables for winter use. Many people gather some of their crops too early and are inclined to blame the storage cellar for their vegetables spoiling, when the fault is in the condition of the vegetables stored.

All crops should be allowed to dry off in the field, and should be thor-

(Continued on page 8)

ESSEX FARMER and HOME MAKER

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

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CALENDAR

October 28th—School staff gives re-
ception to student body.

Tuesday, November 22nd—At 2 P. M.
Graduation Exercises, Class of
1921.

November 24-27—Thanksgiving Re-
cess.

December 17th—Christmas Recess.

January 3rd, 1922—School reopens.

March 8th—Annual Essex County
Farmers' Day and Corn Show.

EDITORIALS

In November another class will be graduated from "Essex Aggie". This is the sixth graduation. The total number who have received diplomas is fast nearing the 200 mark. The goal, however, should not be the number who have graduated but how well have these graduates been fitted and prepared for life's work.

The number who graduate represent only a limited percentage of those who enter. In this respect the experience of the School does not vary much from the experience of the regular high schools of the county, and the proportion is about the same.

Many students enter with a very definite idea as to the courses desired, and when these courses have been completed often times they leave to take up practical work.

Nearly every educational institution in the country is recording record enrollments. The Agricultural School is no exception. One of the most cheerful signs of prosperity is a large, enthusiastic and growing student body. Our enrollment is now 400% larger than it was when the School opened on October 1st, 1913. The increase from last year is 60%.

One of the interesting features of this increase in student membership is the Federal students who are assigned to this school for agricultural training. They now total thirty-three.

The men are taking practical, as well as classroom work in poultry raising, small fruit growing, vegetable gardening, orcharding and other agricultural subjects.

One of the latest cooperative movements in local agriculture is the Essex County Cooperative Dairy Association. For a number of years the dairymen of the county have been carrying on a one-sided struggle for existence. Their work means much to the health and prosperity of a community. Everyone should watch the developments of the new organization with more than ordinary interest.

Athletics (1921-22)

The Athletic Association is planning for a very busy year. Besides the usual schedules in football, basketball, baseball and hockey, an agricultural and track meet is being planned. Students from the special agricultural schools as well as those from the high school departments will be in competition. This meet will be held at the school some time during the fall and should arouse more interest in this form of athletics and also in agriculture.

For the past three weeks thirty men have reported daily for football practice under the direction of Coach Oral A. Page of the School faculty. Captain Holden has succeeded in getting a number of men of last year's team back early, among whom are Peabody, Peach, Murray, Dreano, Wainwright, Roberts and Ewing. Herman Herrick of Beverly, who played right half-back last year, has been assisting the team in getting itself into shape.

Because of the large number of men out for football, a second team has been formed under the leadership of Mr. Hammond of the faculty. One game has already been arranged with Lynn Classical High. This game will be played in Danvers, the date to be agreed upon later.

It is the plan of the Athletic Association to be able to finance all athletics at the School with the money received from student pledges. At the beginning of this year, the Association had \$150 in Liberty Bonds, but no actual cash to begin the season. About \$125 has been collected from student pledges with \$275 still due from this source. An order for football equipment amounting to \$135 has been placed, which leaves the Association again without funds. It is a good time now to settle that pledge and do your part to help support athletics at the School.

"Home—the place where we are treated best and grumble most."

Don't get discouraged. It is often the last key on the bunch that opens the lock."

RUTH WOOD AWARDED SILVER MEDAL BY MASSACHUSETTS DEPARTMENT OF AGRICULTURE

Miss Ruth M. Wood of North Andover was awarded the silver medal from the Department of Agriculture, the presentation being made by Gov. Channing H. Cox at the Greater Lynn Fair, Friday evening, Sept. 16th. This is the highest honor bestowed by the State Department of Agriculture and is awarded annually to the person having an exhibit at an agricultural fair, which shows the best agricultural development or progress. Ruth Wood's herd sire, Sophie 19th and Tormentor 10, was won by her at the National Dairy Show in 1916, the same being offered by the Hood Farm as a prize for stock judging.

Miss Wood won second against a field of 95 boys; she being the first girl to be awarded a prize in such a competition. Since that time she and her family have built up a fine herd of pure bred Jerseys of this strain. It is a very signal achievement, especially in a locality where there are so few Jerseys kept.

Miss Wood graduated from the Essex County Agricultural School in the class of 1920. While a student she made an exceptional record in all of her studies. She especially received many honors in Agriculture. She is at present a Sophomore in the Massachusetts Agricultural College.

Football Schedule—1921

October 8—Pinkerton Academy at Danvers.

October 14—Johnson High at N. Andover.

October 19—Methuen at Methuen.

October 22—Newburyport at Newburyport.

October 29—Norfolk Aggie at Danvers.

November 5—Amesbury at Amesbury.

November 12—Salem at Salem.

November 19—Saugus at Saugus (pending).

November 24—(Thanksgiving Day)
Danvers at Danvers.

NEW BOOKS

The following books are among the most recent to be added to the School Library:

"A Complete Course in Millinery,"
by Julia Bottomley

"Clothing-Choice—Cost and Care,"
by Mary Schenck Woolman

"How to Live,"
by Fisher & Fish

"The American Home Diet,"
by McCollum & Simmonds

"Dietetics for High School,"
by Willard & Gillett

"Life of Ellen Richards,"
by Caroline Hunt

WITH THE COUNTY AGRICULTURAL AGENT

Are You Getting Your Share?

Where is the County Agent? Why does he not call to see me? These are questions asked by people about the county and which are passed on to the County Agent occasionally. In answer I will say that, with the territory which it is necessary for him to cover, not much time is available for personal calls unless upon special request from the individual.

During the meetings held last year in most all the agricultural communities of the county, a request was made by the County Agent to have a committee elected through which to plan the Extension work desired there. Later, each of these committees were called together and a program of work planned. In some communities the interest seemed to center on poultry work, so culling, poultry house building or killing demonstrations were asked for; in others grafting or pruning of fruit trees was called for, while others desired potato demonstrations, etc. This work has been carried out through meetings and demonstrations at farms for the most part. For instance, seventeen poultry culling demonstrations have been planned and carried out with the assistance of the Poultry Specialist; seven meetings for grafting fruit trees; six meetings for pruning fruit trees; five economic potato plots with meetings at each plot to show the methods used, and so on.

This sort of work in addition to the organization of tours and field meetings together with assistance given to organizing farmers' associations and working with those already organized, necessarily cuts down the number of farm calls one individual can make. However, by asking a member of the committee in your town or by writing the County Agent, you may obtain his services or those of any specialist from the Agricultural School or Massachusetts Agricultural College for any problem in regard to your farm operations.

Following is the list of committee men of the towns which have elected a committee. The chairman is placed at the head of the list.

Andover—Dairy, Wm. B. Corliss; Crops, Herbert Carter; Farm Accounts, R. N. C. Barnes; Fruit, George Renney; Poultry, F. H. Foster; Cooperative Buying, Chester Abbott.

Haverhill—Fruit, D. W. Reynolds; Crops, Milton Corliss; Farm Accounts, Chauncey Gleason; Dairy, Andrew Longfellow; Poultry, Joseph Vitum.

Ipswich—Crops, Carl Caverly; Dairy, S. I. Hudgins; Fruit, Samuel Gordon.

Annual Corn Show

Arrangements are already in the making for the Third Annual Corn Show, which is held in conjunction with Farmers' Day at the County Agricultural School this year. Next year, as usual, it will occur sometime in March.

This has been an ideal year to raise corn and a great many corn cribs will be filled to the brim, so a larger exhibit should be made at the corn show in accordance.

Plan now to exhibit, by throwing out the best ears as you husk them and later select from them a single ear, a ten-ear and a thirty-ear exhibit. Remember that the thirty-ear exhibit will be tested for germination besides being entered in competition.

Let's fill several rooms in the school building with corn exhibits this year.

Merrimac—Cooperative Buying, J. K. Sargent; Crops, Leonard Sargent; Farm Accounts, Edson Walker; Dairy, Harold Waterhouse; Fruit, Homer Sargent.

Newbury—Dairy, Elbridge Noyes; Crops, Frank Perkins; Farm Accounts, Joseph Rolfe; Cooperative Buying, Ernest Knight; Fruit, Fred Illsley; Poultry, Stuart Little.

No. Andover—Fruit, George Barker; Dairy, George Ray; Poultry, S. D. Berry; Swine, H. E. Meads; Crops, Rudolph Messerlie.

Saugus—Dairy, C. E. Stillings; Fruit, Walter Penny; Crops, E. M. Longfellow; Poultry, J. A. Raddin; Farm Accounts, Carl F. Koch.

Salisbury—Fruit, A. W. Bartlett; Dairy, Alex. Pike; Poultry, Wilbur Pike; Crops, Charles A. Brewster; Cooperative Buying, Moses Bartlett.

As an example of the Extension work done in an organized community, Salisbury, since December, has had two pruning demonstrations; one poultry house building demonstration; 1 milk testing meeting; two poultry culling demonstrations, one economic production demonstration in raising potatoes; one demonstration in spraying oats to kill wild mustard; one demonstration in home-mixing of fertilizer.

There has been a total attendance of 114 people at the meetings held for these demonstrations and many who attended have adopted some of the practices recommended.

The committees in the organized communities will soon be called together for a meeting with the County Agent to make arrangements for next year's work.

Make an effort to bring some of this work into your town.

ESSEX COUNTY COOPERATIVE DAIRY ASSOCIATION

Farmers Organize to Sell Milk

As a result of several farmers being without a market for their milk, a movement was made to form a co-operative organization, through which to market the milk.

After having a number of meetings to consider where the market should be obtained and visiting milk plants in several nearby cities, a body of farmers finally formed the Essex County Cooperative Dairy Association and elected the following officers: A. H. Cole, Topsfield, President; Robert W. Hill, Salem, Secretary, and E. Lawrence Howie, Salem, Treasurer.

The headquarters of this association are to be at Beverly and a movement to market milk in that city will probably be made at an early date.

SEED POTATOES

Last year the County Agent visited the potato fields of Aroostook County, Maine, and selected seed from fields which were free from disease. One of the handsomest carloads of seed that ever came into Essex County was obtained in this way.

Plans are now under way to make another trip into Maine about the Middle of October to look up seed for next spring.

Demonstrations conducted by the Extension Service have proven that there is a great increase in yield by using Maine seed over the yield from home-grown seed and it is believed that the farmers are so fully convinced of this fact that they will want to secure the best selected seed.

If you are interested in this seed, write to your County Agent at the Agricultural School.

HOLSTEIN BREEDERS ORGANIZE

The Holstein-Friesian breeders of Essex County held a very interesting field day at the farm of Edward Taylor, Methuen, August 9th.

The breeders were favored with a talk by F. M. Peaslee, President of the New England Breeders' Association, and a judging demonstration by C. L. Blackman, Field Agent of the same association.

An Essex County Holstein Association was formed with William B. Corliss of Andover as President, Edmund Bartlett of Salisbury, Secretary and Treasurer.

One of the first pieces of work which this organization is planning is an auction sale of Holstein cattle in Essex County.

WITH THE HOME DEMONSTRATION AGENT

LUNCHEON PROBLEMS UNDER PLATOON SYSTEM

The question of the midday luncheon for the boy or girl who attends High School in the afternoon must be solved according to conditions.

What these boys and girls should have for the midday luncheon is a question that is of vital interest to every mother. During the entire afternoon, the mind must be alert if the student is to make a good showing in recitation and laboratory. This is not possible if a heavy meal is eaten.

If the evening is spent in study, neither should a very heavy supper be eaten. The question is, "How shall the boy or girls be fed so as to be properly nourished under these conditions?"

The proportion and kind of food at each meal depends upon whether the studying is done in the evening or in the morning and on whether there is considerable exercise and play in the evening or in the morning.

If less food than usual has been eaten at this midday meal, a heartier breakfast should be served.

It may be wise to divide the food of the day into three more nearly equal meals than formerly.

At this age, it is of the greatest importance that enough food is eaten.

Suggestions for Suitable Midday Luncheons

Milk Soups and Chowders have the first place in importance. Next to these are the fresh vegetables, as spinach, tomatoes, cabbage and lettuce.

Meat and fish may be served in moderate amounts. Egg dishes are especially good for the main dish.

Potato and the fibrous vegetables as carrots, beets, etc., should be very thoroughly cooked. This is also true of macaroni, rice and all starchy foods.

Always serve a light dessert as fruit or a simple pudding, a custard, orange cream, or gingerbread and apple sauce.

If a hearty chowder is served, omit the meat, fish and heavier vegetables.

Avoid hot breads; rich, sweet desserts; cakes and pastries.

A few good combinations for this meal:

Cream of Pea Soup,
Stuffed Eggs,
Bread and Butter,
Spinach,
Gingerbread and Apple Sauce.
Vegetable or Fish Chowder,
Crisped Crackers,
Cabbage Salad,
Orange Cream Pudding.

The following points are important to remember and can be applied to varying conditions:

Give plenty of milk dishes and fresh vegetables.

Give moderate servings of meat. Be sure all starchy foods are thoroughly cooked.

Serve simple desserts.

EXTENSION CLASSES

Our classes in Dressmaking and Millinery are not only to teach the woman in the home how to make her own clothing, but also that she may help others in the community along the same lines.

It is hoped that whenever any woman uses the information that she has gained in our Extension classes to help another woman that she will inform the Home Demonstration Agent of this work.

Our schedule for the first series of dressmaking lessons is as follows:

Monday, October 3rd—North Andover.

Tuesday, October 4th—Bradford.

Wednesday, October 5th, A. M., Swampscott; P. M., Lynnfield.

Thursday, October 6th, P. M., Merrimac; Eve., Merrimac.

Friday, October 7th—Wyoma, E. Lynn.

Traveling Libraries

The Home Demonstration Agent has a number of traveling libraries of Home Economics books, which she will be pleased to send to any Town Chairman or Local Leader or other responsible person in a town or community where it is not easy to obtain these books from a local library.

There are about twenty books in each library. The community pays the express charges one way. When the library is sent to another community or returned to the Extension Service office, it is shipped C. O. D.

The library includes books on food, clothing, health and community betterment.

Simple Wholesome Breakfasts for Children

Oatmeal with milk, prunes.

Rice cooked with raisins, and milk.

Cream of wheat, cocoa, orange.

Shredded wheat, milk, fresh or canned berries.

Toast or egg on toast may be added to any of these breakfasts.

New Books

"Household Arithmetic,"

Ball & West

"Business English,"

Hotchkiss & Drew

HOUSEHOLD ACCOUNTS

Fifty requests for Household Account Books have come to the Home Demonstration Agent since last January. Women who thought before that Household Accounts would be too much bother have become enthusiastic about the work.

It is not fatal to keeping these accounts if sometimes you are ten cents short or have ten cents more than your book shows that you should have. The important and interesting part is that you learn where your money is going, whether it is being spent to the best advantage. The book is valuable for a reference book. You find that you can tell whether certain kinds of shoes or stockings or gloves have worn well. You are not guessing about these things and you are learning all of the time to buy to better advantage.

After keeping Household Accounts for a year, the money can be apportioned to better advantage for the next year. Each succeeding year of keeping accounts puts the home on a better business basis, and results in the family feeling that they are "getting more for their money."

Use Cabbage

Are you serving cabbage frequently? It is especially good for us when it is raw, as some of its beneficial qualities are likely to be lost by cooking.

Plain chopped cabbage, seasoned with salt, pepper and vinegar, is good as a relish. Salad dressing may be added and then we have a plain cabbage salad.

The following vegetable combinations are all good: cabbage and beets; cabbage and celery; cabbage and peppers.

Hearty luncheon dishes may be made by combining chopped cabbage with left-over meat. Beef, lamb or ham are all suitable for this combination. When the cold baked beans are not sufficient for luncheon for the entire family, add chopped cabbage. Cabbage and sliced egg with salad dressing make another hearty supper dish.

Salad Dressing Without Eggs

2 tb. butter, 2 tb. flour, $\frac{3}{4}$ c. milk, $\frac{1}{4}$ c. vinegar, $\frac{1}{2}$ tb. sugar, $\frac{1}{2}$ tb. salt, 1 t. mustard. Cayenne (a few grains).

Melt butter, add flour and seasonings, gradually. Add milk gradually. Cook until evenly thickened. Add vinegar slowly.

EXTENSION SERVICE IN POULTRY

SIXTH ESSEX COUNTY EGG LAYING CONTEST

The Sixth Essex County Egg Laying Contest is now drawing to a close, the hens have been laying heavily for fifty weeks and completed their fifty-second week on October 8th. The three hundred hens in this contest have made the highest average we have ever had in any of our Essex County Contests, for, they have an average production of 162.4 eggs.

This contest also holds the distinction of having more 200-egg hens than any other we have ever held before. There are at present 65 200-egg hens in the contest. The leading hen laid to date 274 eggs, which is the record for the Essex County Contest. She is a White Wyandotte owned by Wm. C. Peck of Storrs, Conn., and has practically led the contest from the start. There is a tie for second place between R. I. Red hen No. 276, owned by Deer Brook Poultry Farm, Short Falls, N. H., and R. I. Red hen No. 291, owned by W. Otis Day, Westford, Mass., each having laid 258 eggs. Barred Rock hen No. 176 is a close third, having laid 257 eggs. She is owned by the Connecticut Agricultural College, Storrs, Conn. Mr. F. M. Johnson's pen of White Leghorns has more 200-egg hens than any other in the contest.

Leading Pens to Date

At the end of the fiftieth week, the leading pens stand as follows:

Pen 29, W. Otis Day, R. I. Reds, 1978 eggs.

Pen 5, F. M. Johnson, W. Leghorns, 1941 eggs.

Pen 8, Wm. Clifford Peck, W. Wyandottes, 1908 eggs.

Pen 27, Deer Brook Poultry Farm, R. I. Reds, 1877 eggs.

Pen 6, Philip A. Lee, W. Leghorns, 1854 eggs.

Pen 1, J. F. Dubois, W. Leghorns, 1797 eggs.

F. M. Johnson's Leghorn pen has laid 1941 eggs as against a total of 1628 eggs which his pen had laid at this time in last year's contest. Peck's leading Wyandotte pen with its total of 1908 eggs is a long way ahead of the leading Wyandotte pen of T. H. West's in last year's contest with their total of 1502 eggs. Harrington's pen of White Rocks, with a total of 1794 eggs, leads the White Rock pens this year and is 38 eggs ahead of Applecrest Farm pen of last year, the high pen in White Rocks. Essex County Training School, Barred Rocks, with a total of 1780 eggs, lead the Barred Rocks and are 189 eggs ahead of the leading Barred Rock pen of last year. W. Otis Day's Reds lead the Reds with a total

of 1978 eggs as compared to the leading Red pen of last year with a total of 1741 eggs. There are twenty-five out of the thirty pens of hens that have averaged over twelve dozen eggs per hen.

The excellent results that the contestants have obtained this year are due in no small measure to the fact that practically all of the successful pens have been product of careful selection and correct methods of breeding for egg production.

POULTRY POINTERS

Fall Colds.—Prevent the fall colds by removing the causes. Prevention is much cheaper and easier than curing when infected. One of the main causes of fall colds is crowding and heating birds in corners of houses on the floor. It is important that when pullets are housed to see that they are all roosting at night and not piled in a heap on the floor.

Blue Butter Pullets.—When you are housing your pullets in their winter quarters at this time of year, they should be treated for lice with Blue Ointment or Blue Butter. Blue Ointment can be purchased at any drug store and when mixed with equal parts of vaseline makes the cheapest and best material for ridding hens of lice. Apply piece of blue ointment the size of a green pea just below the vent and rub it into the skin well so as the hen cannot pick it up. One application will eradicate all lice on the hen.

Culling Pullets.—It pays to house only your best pullets. Poor pullets in the fall will not make good layers in the winter. Sell all your pullets that are slow maturing, thin undersized, crowheaded, deformed, crooked backs, crooked breast bones, crooked beak and loose feathered. Don't make your good pullets feed your drones.

Extension-Farm Bureau Tour

Farmers of Essex County, Mass., and Rockingham County, New Hampshire, enjoyed a joint tour of the two counties on September 10.

There were about 50 automobiles containing fully 200 people, who took part in the tour.

Farm visits were made in the towns of Topsfield, Ipswich, West Newbury, Salisbury, Mass., and Hampton Falls, Stratham and East Kingston, New Hampshire, where projects and demonstrations of dairying, poultry and farm crops were shown. The intention of each visit was to show some farm practice which would be worth while to follow. For instance, the

CULLING DEMONSTRATIONS

Demonstrations in Culling Hens Have Been Well Attended on Many Essex County Farms

There have been numerous requests for culling demonstrations in the last two months by Essex County Poultry Raisers. In response to these calls, John S. Carver, Poultry Specialist of the Essex County Agricultural School, planned culling demonstrations at Joseph Vittum's, Haverhill, August 6. F. H. Foster's, Andover, August 20. F. W. Deering, Topsfield, August 26. F. W. Deering, Topsfield, September 2. Charles W. Emerson, Haverhill, Sept. 3. B. S. Gale, Amesbury, September 6. J. A. Raddin, Saugus, September 9. Edson Walker, Merrimac, Sept. 16. R. N. C. Barnes, Andover, Sept. 20. Topsfield Fair, Topsfield, September 23. Topsfield Fair, Topsfield, September 24. W. B. Moore, West Peabody, Sept. 26. Total attendance 395. Average 36.

This is the time of the year to select your breeders from the better layers of last season. The better layers will moult late in the fall and have white legs.

POULTRY FIELD DAY

Essex County Poultry Raisers Spend Interesting Afternoon at Agricultural School

A very well attended poultry field meeting was held on the grounds of the Essex County Agricultural School on Saturday afternoon, August 27th. About 150 poultry raisers were present to hear Professor A. W. Richardson from the New Hampshire State College speak on "Breeding from Pullets". Director Fred A. Smith of the school gave a cordial welcome to the visitors and spoke on "The School as a Factor in the Poultry Industry in Essex County".

Poultry Specialist, John S. Carver, of the Agricultural School explained the "Home Egg Laying Contest" and conducted the visitors around the Sixth Essex County Egg Laying Contest and School Poultry Plant.

home-made silo at Mr. Tenney's at Ipswich was to show the economy of building your own silo rather than buying one ready made, especially where lumber can be obtained from the home wood lot; the potato demonstration at Mr. Bartlett's was an example of a field where "greening" of seed, spraying with home-mixed Bordeaux and other practices along with comparison of varieties of seed; at the potato plots of Applecrest Farm, Hampton Falls, the advantage of using Northern grown seed rather than home grown seed was very closely demonstrated.

WITH THE COUNTY CLUB AGENT

CLUB WINNERS ENJOY THEIR REWARD

Week Well Spent at Camp Gilbert.
M. A. C., Amherst, Mass.

Camp Gilbert opened on Friday afternoon, July 22nd. The camp was located on the campus of the Massachusetts Agricultural College at Amherst and was named for the present Commissioner of Agriculture in this state. Camp Gilbert was established to give the boys and girls who had proved themselves most expert in the various club enterprises in each county a reward for their good work.

The Essex County delegation consisted of the following young people: Helen Knight, Newbury; Mildred Wood, North Andover; Charlotte Hirschner, Amesbury; Bernard Phelan of Ipswich; Philip Dimlick, Andover; Hugh Parkhurst, Gloucester. The boys were housed in the Drill Hall of the College and the girls in the Abigail Adams Hall, a new dormitory for the young ladies at the college. Every county in the state with the exception of the Island of Dux was represented, even the Island of Nantucket sent along a half a dozen of her best workers to account for their skill.

The next day the tour of the animal husbandry section of the college farm proved very interesting. Saturday afternoon was enjoyed in a way which all will remember. The entire camp of one hundred boys and girls were transported by automobile to the foot of Mt. Sugar Loaf, seven miles from Amherst. Each one of the party climbed to the summit along the paths and gullies that criss-crossed on the mountain side. The top of Mt. Sugar Loaf is flat, affording a fine observation post and resting place for the climbers. For two hours the boys and girls enjoyed the magnificent view. At the base of the incline is a level grassy spot and for an hour games and songs were enjoyed. Lunches had been brought from camp and after they had eaten the campers returned to Amherst. Sunday was spent in the most quiet way possible. The young people were transported to church and back to camp and rest was enjoyed in the afternoon followed by a trip to the M. A. C. museum where many interesting curios were seen. Monday was Athletic Day. The boys and girls from Camp Gilbert competed with the picked athletes from both the Boys' Summer Camp and the Girls' Summer Camp at the College and swamped their opponents and carried nearly every point. It seems that our club winners can do other things as well.

Tuesday was Grange Day and after seeing various makes of tractors demonstrate, the club winners listened

for two hours to a most tense and exciting narrative by Sergeant McKay formerly with the Royal Northwest Mounted Police. After dinner some of the club champions were requested to speak to a gathering of Grangers and following their interesting talks, the Camp Gilbert songs and cheers were given.

The following day inspections of the college poultry plant occupied the morning, ending with a poultry judg-



Our Bread Champion on Mt.
Sugar Loaf

ing contest. Hugh Parkhurst of Gloucester succeeded in winning second place. In the afternoon a visit was made to Orient Springs, one of the natural beauty spots near Amherst. That evening the girls acted as entertainers, inviting the boys to their dormitory to witness some dramatics. The evening was well spent with an exhibit of fine talent and originality.

The most important event of the last day at camp was the Stock Judging Contest. This event was won by Mildred Wood of North Andover. In the evening the various state and county leaders furnished amusement for all by staging a mock trial in which Mr. Farley was the judge.

Friday morning the good-byes were said and the youngsters started on their journey home. There were some who had far to go and some lived near. All voted that they had enjoyed Camp Gilbert to the limit and were thankful for the Boys' and Girls' Club Work in the old Bay State.

Oliver Wendell Holmes said: "I find the great thing in this world is not so much where we stand, as in what direction we are moving. To reach the port of heaven, we must sail sometimes with the wind, and sometimes against it; but we must sail, and not drift, nor lie at anchor."

CLUB ACTIVITIES AT THE FAIRS

Poultry Team State Champions

The Essex County Poultry Judging Team attended the New England Fair at Worcester on September 2nd to take part in the Inter-County Poultry Judging Contest. The team consists of Donald Anderson, Hugh Parkhurst and Alton Perkins, all Essex Aggie boys. They belong to the Poultry club and worked with the County Club Agent for weeks in preparation for this event. The contest decided the State Championship and the Essex County team run up a score of 972 which was the highest team score made. The highest individual score was made by Donald Anderson, a total of 341 points. The boys will receive gold medals in recognition of their victory.

Topsfield Fair was the largest and best fair our county has ever seen and one of the things that helped make it go was the showing made by boys and girls. There was a large display of fine vegetables which were in nearly every case the products of Garden Club members. The canning exhibit was without an exception the work of Canning Club Members. One hundred and seventy-five jars were entered in collections and suitable prizes were awarded on the best work. Several loaves of bread were sent in by members of the bread club. The poultry exhibit was most interesting. Poultry Club members entered 95% of the birds shown in the Junior Department. There was a fine class of Rhode Island reds as well as several other breeds. The feature of the Junior Show was the turkey show. Quite a few fine young gobblers were sent in by their youthful owners and there was good competition.

A Stock Judging Contest was conducted by H. B. Millard of Essex Aggie on Saturday, September 23rd. The first prize was a heifer calf offered by Mr. Lawrence Dodge of West Newbury, President of the Essex County Farm Bureau. This offer created great interest and unusual competition. The same day, a poultry judging contest was carried on by Assistant State Club Leader E. H. Nodine. Several poultry club members entered. Saturday was Demonstration Day also. Two sets of demonstrations were carried on, namely, Home Economic and Agricultural. Beverly won first, second and third in the Home Economics Demonstrations and first in the Agricultural. Georgetown sent an agricultural demonstration team which won second, and the Essex Aggie team won third. Demonstration work by club members is encouraged to teach them to give to others the knowledge they have acquired.

ALUMNI DIRECTORY

Class of 1917

Agricultural Department

Bryson, Thomas C. Jr., Clerk,
Mohican Market, Salem, Mass.
111 Broadway (res.)
DeQuoy, Stanley W., County Club
Agent for Essex County,
Essex County Agricultural School,
Hathorne, Mass.
Eastwood, J. Edgar, Senior Student,
N. H. State College, Phi Mu
Delta House,
Durham, N. H.
Freedman, Saul R., Veterinary Stu-
dent, Ohio State University,
47 West 11th Ave., Columbus, Ohio.
Fuller, Arthur H., Farmer,
So. Main St., Middleton
Grey, Melville S., Farmer at Wenham,
68 Dane Street, Beverly (res.)
President Essex Aggie Alumni Assn.
Haggerty, J. W. (deceased)
Hall, Everett, Farm Mechanic,
Tide Acres Farm, Duxbury.
Hopkins, E. D. (deceased)
Hodgdon, Donald, Station Agent,
North Conway, N. H.
Oliver, Wendell T.,
Moon's Nurseries, Morrisville, Pa.
Ranen, Leo, (deceased)

Robson, H. Ellsworth, Engineer,
21 Whitney Ave., Beverly
Seeley, J. Harold, Clerk, A. C. Law-
rence Leather Co., Peabody,
134 Bridge Street, Salem (res.)
Shirley, Ralph C. Florist,
14 Braman St., Danvers
Stephen, Anders, Florist,
Lynn, Mass.

Homemaking Department

Annan, Mildred C., Employed as Ex-
tension millinery teacher in
Counties in Mass. and Conn.,
120 Haverhill St., Lawrence (res.)
Brown, Louise, (deceased)
Clement, Anna (Mrs. Earl Turner)
homemaker,
Lawrence, Mass.
Hoyt, Linda (Mrs. Wm. Todd) home-
maker,
51 Yale St., Bridgeport, Conn.
Ellingsworth, Miriam (Mrs. Miriam
Robinson) homemaker,
Abbott St., Marblehead, Mass.
McCormick, Gertrude, Doctor's Asst.,
C Main St., Brockton, Mass.
Taylor, Ruth (Mrs. Prince Woodber-
ry) homemaker,
108 Colon St., Beverly.

SCHOOL STAFF AND ORGANIZA- TION FOR 1921-1922

Fred A. Smith, Director

Agricultural Department

Harry A. Farrar, Educational Man-
ager, Farm Management, Forestry.
Robert A. Mitchell, Vegetable Garden-
ing, Agricultural Survey.
Frank H. Wilson, Jr., Floriculture,
Ornamental Gardening, Farm Bot-
any, Soils.
John S. Carver, Poultry, Hygiene.
Franklin Hammond, Farm Mechanics,
Mechanical Drawing.
F. Leon Hannaford, Poultry Agricul-
tural Survey.
Ellery E. Metcalf, Vegetable Garden-
ing, Civics.
George Gifford, English, Mathematics.
Harold B. Millard, Dairying, Small
Animals, Farm Crops.
Chester P. Spofford, Supervisor Special
Students, Economics, Farm Ac-
counts.
George A. Meigs, Assistant Director,
Orcharding, Marketing.
Harold A. Mostrom, Science.
Harold T. Stowell, Vegetable Garden-
ing, Small Fruits.
Oral A. Page, Athletics, Physical
Drill, Hygiene.

Homemaking Department

Ella Morrill, Department Head, Citi-
zenship, History.
Ruth S. Erickson, Foods, Dietetics.
Helen B. Knapp, Foods, Science.
Amy S. Irish, Clothing, Household
Accounts.
Norma A. McCrillis, Foods, Clothing,
Hygiene.
Ethel Browne, Clothing, Costume De-
sign, Millinery.
Agnes Dalton, Millinery, Clothing,
Textiles.
Margaret Hastings, Houseplanning,
English, Arithmetic.

Extension Service Dept.

Helen Pierce, Assistant in Lunchroom.
Robert M. Stiles, County Agricultural
Agent.
Alice J. Bunce, Home Demonstration
Agent.
Stanley DeQuoy, Junior Club Agent.
John S. Carver, Poultry Specialist.

Office Organization

Eva M. Bacon, School Secretary.
M. Elizabeth Fitz, Stenographer.
Anna B. Cashman, Stenographer.
Dorothy E. Demeritt, Stenographer.
Dorothy Sinclair, Stenographer.

Farm Organization

William E. Sanford, Farm Foreman.

AGRICULTURAL FAIRS

(Continued from page 1)

table exhibits from the Sorosis Farms and the Essex County Training School. The center table was given over to a display of flowers, fruits, vegetables, canned goods and sewing of the Boys' and Girls' Clubs of the County. The balcony was filled with trade exhibits pertaining to the home.

The poultry tent was filled to overflowing with both fancy and utility birds of the standard breeds. Demonstrations in culling, picking and dressing were put on by Prof. Luther Banta of Massachusetts Agricultural College and a demonstration team from Essex County Agricultural School.

Additional housing space had to be provided for the live stock department to accommodate the large number of entries. The several classes were hotly contested, especially for the Grand Champion Cow and Guernsey Yearling Bull. There were fine exhibits of hogs, sheep and goats. In spite of the advent of the auto, there was a good showing of horses.

Considerable interest was manifested in the plowing contests and tractor demonstrations. Improved farm machinery received the attention of large numbers of farmers.

The vegetable and field crops displays were of high quality. There was also a fine offering of fruits for this year. Flowers were in evidence both in competition and growers' display.

Fancy articles and canning claimed their share of the attention.

That the boys and girls of the County are keenly alive to the opportunities in agriculture was clearly evidenced by the way in which they took hold of the contests for the prizes offered by the Farm Bureau and by prominent citizens of Essex County, for demonstration team work and judging contests.

The new race track afforded a good deal of excitement and pleasure to the devotees of the fast horse.

One of the most pleasing features of the Fair was the relegating of the eating stands and midway features to the back of the grounds and having the worth-while things well to the front where they could not be missed.

SEASONAL NOTES

Corn fields that were not "seeded down" at the last cultivation should be sown to some "cover crop" to prevent leaching of the soluble nitrates, and also to prevent soil erosion (washing.) One of the cheapest and best "cover crops" for Essex county is winter rye. Next spring this will make excellent green food for the dairy herd, or will be very beneficial as humus if plowed under.

The family in which accounts are kept is the family which can show a bank account as the result. There are account books printed and for sale, which make the plan simple of understanding and require but little time to record. Why don't you try it?

Write to the Essex County Agricultural School, Extension Department, and find out all about it.

Now is the time to plant your bulbs for spring flowering. Select good varieties of tulip, narcissus, hyacinth and crocus and plant in a southerly exposed location.

Homemaking Department

Registration being over, we find more girls enrolled in the Homemaking Department than ever before. The ensuing year promises to be most successful with our increased numbers, and the apparent interest which exists among the students. The entering girls have brought new life from other schools, and their enthusiasm added to that of our old pupils is inspiring.

Summer project work has been uppermost in the minds of the pupils and teachers for the past few weeks. This division of our work presents many interesting features. The project work is carried out in our Vocational Department by assigning to the student a piece of work that is based on previous knowledge in either clothing or foods. The assignment requires the attainment of new knowledge, actual practice and individual planning. Students in the Homemaking Department have this summer undertaken, and successfully accomplished, many kinds of projects, which may be classified as follows:

- 10 took entire charge of their homes for a specified length of time.
- 10 were waitresses in Summer Hotels.
- 6 were mothers' helpers.
- 2 entered training at the North Shore Babies' Hospital.
- 22 made clothing outfits for themselves or younger children.
- 1 did commercial canning.
- 10 did home canning.

Apart from the definite assignments made, the girls to be completed at home, were the canning classes conducted during the summer vacation by the members of the staff in the Homemaking Department. Our students then preserved several kinds of jellies and jams, besides many quarts of fruits and vegetables. For doing this work the girls received beneficial practical experience aside from adequate financial remuneration.

Lillian Horne, H. S. Special, 1921, has entered the three-year Vocational course given at the Framingham State Normal School.

Grace Hartman, 1920, is training in a Sanitarium in Sacramento, California.

Frances Brown, 1922, has been doing special canning at the Sunbeam Tea Room, Salem, most of the summer.

Gladys Anderson, 1921, has entire charge of the three-year-old child in the family of Mr. and Mrs. Kremetz, East Orange, N. J.

The Essex Aggie Vegetable Booth has been under the management of Janet Stanley, 1921.

Six of the present teaching staff in the Homemaking Department attend-



Fourth Annual Junior Field Day

ed the Teacher-Training course given at Hyannis Normal School in August.

Announcement is made of the marriage of Miss Louise Berger, '21, to Mr. Ernest Waters, June 25, 1921, in Portsmouth, N. H.

Helen Pierce, H. S. Special 1921, is back at Essex assisting in the Students' Lunch Room.

Calendar dates for the fall term are already being reserved, the most important of which is graduation that takes place on the afternoon of November 22, 1921.

SCHOOL NOTES

Several students were among the prize winners at the recent fairs. The boys were encouraged to exhibit and to enter the various contests and they did so with enthusiasm.

In the Junior plowing contest at Topsfield Earle Glines won first prize, James Curran second, and Wilfred Jordan, third. The first prize in poultry judging contest was awarded to Donald Anderson, while Alton Perkins and Hugh Parkhurst received second and third places.

In the Junior vegetable exhibits Hugh Reilly won eleven firsts, four seconds and a gratuity on an Essex Hybrid squash. John Ross secured nine firsts, four seconds and one third.

The Junior cattle judging contest was won by Edwin Williams. Alfred Bryer secured third place in this event. Winslow Dunnells received a first prize on his exhibit of a pure bred heifer calf.

In the cattle judging contest at the Greater Lynn Fair, Edwin Williams secured first place, James Lord second, and Harold Hansen third.

The students made a very creditable showing and did much to help make the junior exhibits and contests worth while.

The first joint assembly was held in Agricultural Hall on Wednesday, Sept. 21st. This meeting was held

in the interest of athletics. Mr. Hammond, treasurer of the Athletic Association and Mr. Oral A. Page, the faculty football coach were the principal speakers. R. Ewing, A. Perkins and D. Anderson, members of the junior class did credential work in leading the students in songs and cheers.

Among the recent visitors to the school were G. Stewart Barnaby Class of 1917, Leonard B. Ives, Jr. and Donald Scher, both of the Class of 1920.

George Garland of the present senior class has returned from the Coomasset Ranch, where he has spent the greater part of the summer. This ranch is located on Cape Cod in the vicinity of Falmouth and Barnstable and comprises 15,000 acres, 500 of which are under cultivation.

Garland's project consisted of greenhouse work until July, when he was transferred to tractor work. He took part in the harvesting of 45 acres of rye and gained some experience in large scale farming.

STORING VEGETABLES

(Continued from page 1)

oughly cool before going into storage. The storage cellar should be cooled down before placing any vegetables in it.

Celery may be stored in a cellar. Take up with roots and plant in a moist soil, in boxes or on the cellar floor. Keep roots moist and tops dry. Celery thus treated will make a slow and blanched growth.

Parsnips may be stored as beets and carrots are. However, as they improve with freezing, they may be left in the ground until spring. They are excellent after the frost goes out.

Cabbage should be stored in a very cool temperature in a cellar or pit, avoiding piling in bulk. Slight freezing will do no harm.

ESSEX FARMER AND HOME MAKER

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Vol. 4

HATHORNE, MASS., JANUARY, 1922

No. 1



SCENES ABOUT THE SCHOOL FOLLOWING THE DECEMBER ICE STORM

THE VALUE OF DAIRY PRODUCTS

Milk and Milk Products

It has been said that there is no one food except milk which can not be eliminated from the diet—it is the only food for which there are no easily found substitutes.

Milk contains all the essentials of an adequate diet. The proportions of the different nutrients vary somewhat, but the average (composition) percentages are as follows: water, 87 per cent.; protein, 3.3 per cent.; fat, 4 per cent.; carbohydrates, 5 per cent.; mineral matter, 0.7 per cent. Although more than four-fifths of milk is water, it contains only a little more water than do potatoes, also lean meat. The value of milk is due to the fact that it contains proteins of excellent quality valuable ash, indispensable vitamins and also fat and carbohydrates. It is a perfect food for infants, but for the normal healthy adult it is undesirable as the sole article of diet, because the food principles are not in proper proportions for the adult and because it furnishes no indigestible residue to supply bulk for the perfect functioning of the intestines.

The value of milk as a food is not appreciated by many people. It is frequently regarded as a beverage rather than a food, while in fact a quart of milk is equivalent in fuel value to approximately nine ounces of white bread, one pound of lean beef and nine eggs. It contains as much protein as about one-third of a pound of lean beef, and in addition about as much fat as is supplied by one and one-half ounces of butter, over one and one-half ounces of milk sugar or lactose, and valuable mineral salts.

Compared with other animal foods, milk is a cheap food and even at present prices should enter freely into the daily dietary.

Except under a few conditions, as in diseases of the liver, when all fats are prohibited, the protein is the only indigestible constituent of milk and its digestibility often depends largely upon the method of taking the milk. It should be taken slowly so that the action of digestive juice on the protein will not form large curds difficult of digestion. If milk is sipped slowly, the curds will be small and hence readily acted on by the gastric juice in the stomach. For this reason, the combination of milk with another food material, as bread or cereal, may render it more easily digestible.

Butter is made from cream by churning. This motion ruptures the albuminous envelopes which enclose the fat and thus allows it to be packed together in a solid mass, leaving the buttermilk which contains nearly all the protein of the milk and lactose. The flavor of the butter is due to the growth of bacteria on the cream when ripening or, the addition of pure cultures of the bacteria that will give the desired flavor. Salt is added to the butter partly for the purpose of a preservative and partly to give it an agreeable flavor. Butter so readily absorbs unpleasant odors that it should be kept in a closed jar and in a cold place.

Butter is the most easily digested of all the fatty foods and is absorbed almost completely. For this reason, it is a valuable source of fat in illness and for children.

The value of skim milk as a food also needs to be emphasized. It has lost most of the fat in the skimming

(Continued on page 7)

BROKEN FRUIT TREES MAY BE SAVED

Consider Carefully Before Cutting

Many of the fruit trees that were split during the recent storm will make good trees yet if they are given a chance. On old trees large branches that are particularly valuable may be drawn back into place and bolted. Young trees that lose scaffold branches will usually balance themselves as they grow by filling in the injured side with new branches, if a reasonably good piece of tree is left standing.

At any rate considerable judgment is required in handling these trees and it will not help matters to rush into the orchard with an axe and complete the destruction.

* * *

Both Old and Young Trees May Be Repaired

A great many of the old trees that have been injured are not worth much attention, but it is just as well to think it over for a couple of months before cutting them down. If a sound trunk and a start toward a top are left, a vigorous old tree should be able to grow a new top in a short time. The broken branches should be pruned away cleanly and large wounds should be smoothed to facilitate healing or at least to retard the progress of decay. The amount of time that a fruit grower can afford to spend on a tree of this kind must be left to his own judgment.

A great many vigorous old trees have had one or more large branches broken to the ground. If there is a reasonably large and sound piece of wood connecting such a branch to the tree, the branch may be pulled back

(Continued on page 8)

ESSEX FARMER and HOME MAKER

HATHORNE, MASS.

Published by the Trustees of the Essex County Agricultural School.

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CALENDAR

Jan. 3rd—School Reopens.
Jan. 20th—Second School Term Ends.

Jan. 23th—Extension Class in Sewing at the School.

Feb 4—Boston Market Gardeners.
Feb. 15th—Winter Field Meet. Chabacco Pomona Grange at School.

March 16th, 1922—Annual Essex County Farmers' Day and Corn Show.

EDITORIAL

The large enrollment at the present time is a matter of gratification to all friends of the School. The enrollment for the year is now well above 300 students. There is also a good substantial waiting list asking for admission at the time when the next class will be enrolled. All of the class rooms are now in use and it will shortly be necessary to extend class rooms to some of the outlying farm buildings.

Through the questionnaire concerning occupation of graduates, which has recently been sent out from the Director's office, some very interesting returns have been received. It would appear that the School is serving its purpose along the lines intended. Of the entire list of graduates from the Agricultural Department 80% are at present engaged in agricultural work in Essex County and the balance elsewhere. There are 6 graduates pursuing advanced agricultural studies at agricultural colleges. The latter are distributed as follows: Mass. Agricultural College, 2; Connecticut Agricultural College, 2; New Hampshire State College, 1; Ohio State University, 1. An institution having been graduating students for so short a period should in the face of these returns, be the object of congratulations. Several of those now engaged in non-agricultural employment assert that they are accumulating capital to be used in some farming enterprise later.

TRUSTEE OF SCHOOL DIES AT HAVERHILL

Benjamin B. Gilman of Haverhill, County Commissioner and Trustee of the Essex County Agricultural School, died at his home in Bradford, Monday, December 5th. He had not been in the best of health for several months. Mr. Gilman has been one of the County Commissioners since November 9th, 1920 and a Trustee of the School since January 1st, 1921. He was very interested in the work of the Agricultural School and for several years had entered pens of poultry in the Egg Laying Contest.

The passing of Benjamin B. Gilman takes from Essex County a man whose life was devoted to the service of his fellows in many activities both fraternal and public. He was a valued citizen and an excellent friend. He was in every respect an admirable example of a good citizen.

FARM IMPLEMENTS AND SPARE TIME

The season for field work is over. All farm implements should be properly stored. They should be carefully examined for repair needs. Look for

1. Worn, broken or bent parts.
2. Loose nuts and bolts.
3. Moving parts. Are they in good condition, oiled and free from rust?
4. Temporary repairs made during the past season. This is the season for making temporary repairs permanent.

Have all implements well oiled and stored away from dampness, and in such a location that they can be gotten at readily to make the necessary repairs.

Order new parts as soon as possible. This will insure early deliveries, your machines can be put in order before there is need of them in the field.

When ordering parts, obtain only parts made by the manufacturer of your machine. He makes parts to fit. Other makes of parts may or may not fit.

Paint all implements. The paint costs very little but the machine will last longer and give you more satisfaction, than rusty battle-scarred specimens.

When painting be careful not to cover any of the numbers or names painted on implements. Quite often these are of great value to the dealer when you order new parts.

By tramping the snow around the apple trees, you may make it difficult for mice to damage the trees later in the season when the snow is deep.

ATHLETICS AT ESSEX

Football, as usual, held first place in sports this fall and an unusually strong team was developed, which in spite of continuous handicaps, due to injuries, overwhelmed our old rival Danvers in the Annual Thanksgiving Day clash.

Mr. Page of the faculty, called out the candidates early and the team was in good shape for the opening game with Pinkerton which had already played three games. The Aggies held Pinkerton scoreless till the last minute: 7-0.

With the sting of this defeat, Capt. "Scoop" Holden spurred his team on to an overwhelming victory against Johnson High, 51-0. Methuen, the next team, proved too strong for Essex, and won 9-0. Holden, Raddin, Ewing and several others being injured, the first two for nearly the entire season.

The Aggies, with a crippled team, braced by many substitutes, did well against Newburyport team, holding them to one lone touchdown. Norfolk Aggies played Essex to a standstill for 3½ periods and then old Essex arose and showed what she could do, by sweeping Norfolk the entire length of the field, Ewing scoring the touchdown, 21-6. The following week Aggie played a wonderful game against Amesbury and held them to a tie for the first half. Forward passes were featured, mostly to Wainwright: score Amesbury 27-7.

Aggies played Salem Armistice Day on a muddy field making our game of passes impossible. Dreano was injured to add to our handicaps which notwithstanding, we held Salem 13-0.

Danvers developed a strong team, even defeating Amesbury 20-7, and expected to have the edge on Essex. Coach Page had nearly two weeks to prepare his team and was ably assisted throughout the season by "Hank" Herrick, '21 and the boys were in excellent condition for Danvers. The result was that on the snow, Aggie crushed through the Danvers line for three touchdowns, and held Danvers scoreless; yes, to three first downs, and gave the second team their merited share in winning the game. Score 19-0.

The season was a decided success; for developing fine spirit and true sportmanship; for winning its big game of the year; and lastly for developing a wealth of splendid material for 1922. Football letters were awarded to:— Capt. Holden, Peach, Wainwright, Allen, Sargent, Ewing, Murray, Williams, A. Perkins, M. Roberts, Glines, J. Tucker, Anderson, Dreano and Mgr. W. Moore.

As a special merit of reward and distinction class numerals were awarded in football to:— Raddin, Holmes, Wetterberg, C. Hansen, O'Keefe, Johnson.

WITH THE COUNTY AGRICULTURAL AGENT

TWO-DAY EXTENSION MEETINGS Who Wants Them?

Extension Schools are in full sway throughout the State for the following two months. Committees desiring meetings for any of the subjects mentioned should get in touch with the County Agent at once. There is no expense to the community other than providing a meeting place.

Last year two-day schools were planned for Merrimac and Andover but, on account of storms, were cut to a single day each. Andover has asked for another one this year. Arrangements can be made to have a program for the women at the same time if room is provided and application is made at once.

The subject for the school can be chosen from the following:

"Animal Feeding," which takes up the principles of animal feed requirements, Balancing rations, Daily Herd Management, Value and Care of Farm Manures, etc.

"Soils and Crops." Demonstrations and lectures on Cash Crops, Soil Needs, Commercial Fertilizers, Home Mixing, Making Bordeaux and other problems.

"Orcharding." Consists of Care and Fertilization, Pruning, Grafting and Budding, Spraying and Harvesting.

"Poultry." Housing, Feeding, Breeding for Egg Production, Disease Control, Killing and Culling, Incubating and Brooding.

"Farm Management."

The following lectures:

Principles of profitable farm management. Successful and unsuccessful farms in Massachusetts and Why; Farm accounts and how to keep them; Analyzing your farm business.

Potato Demonstrations Completed

The potato demonstrations of which you have read in previous issues, have now been completed and the results are published below.

The purpose of these demonstration plots was to show certain practices which would assist in increasing the yield. Of first importance is the securing of selected Northern seed, as has been shown by tests all over the State. Another important point is that of "greening" seed, by placing in the sunlight for 10 days or two weeks before planting. Spraying with home-made Bordeaux, properly mixed, is very essential in raising a good crop.

Meetings were held at the demonstration plots where these practices, together with those of cutting seed,

treating for disease, methods of cultivation, and others were shown.

Accurate accounts were kept of all expenses, labor and rent of land included, on each of these plots.

These demonstrations had a total acreage of 6.8 acres, produced 1737 bushels of tubers and cost \$1267.71 to produce.

MIX FERTILIZERS Save Money

New fertilizer prices have just been received and show a considerable decrease from last year's quotations. The change comes largely through the drop in potash prices and should have a tendency to increase the use of high grade fertilizers.

The 4-8-4 fertilizer which last year cost \$56.00 is now quoted at \$45.00 per ton, using the prices given by the Essex County Cooperative Association in both cases.

A home mixed fertilizer of the same analysis as the above can be made by putting together the chemicals on the barn floor and shoveling them over a few times. This mixture costs only \$32.96 or a saving of \$12.00 per ton, as follows:

150 lbs. Nitrate of Soda	\$ 5.32
100 lbs. Sulphate of Ammonia	3.60
250 lbs. Tankage	7.12
1000 lbs. Acid Phosphate	12.50
150 lbs. Muriate of Potash	4.42
1650	\$32.96

While you have only 1650 lbs. of material, it is the equivalent of a 4-8-4, ready-mixed, containing 4% ammonia, 8% phosphoric acid and 4% potash.

The remaining 450 lbs. is simply a filler in the commercial goods.

A popular brand this year should be the 5-8-5 which costs \$51.00 and can be mixed at a saving of \$13.65 with

100 lbs. Sulphate of Ammonia	\$ 3.60
200 lbs. Nitrate of Soda	6.80
300 lbs. Tankage	8.55
1000 lbs. Acid Phosphate	12.50
200 lbs. Muriate of Potash	5.90
1800	\$37.35

A number of farmers in the county mixed the chemicals last year and found the home made goods perfectly satisfactory. In fact, some go so far as to say they received a larger yield than from the ready mixed goods.

Some demonstration meetings for "mixing" have been arranged with the county agent and others will be planned in any communities where they are requested.

ANNUAL CORN SHOW Select Your Exhibit Early

As stated in the last issue, the Annual Farmers' Day and Corn Show is to take place at the Agricultural School some time in March.

Exhibits of flint, dent, sweet and pop corn will be included in the list. Ten-ear exhibits, single ear, and in the case of all but pop corn, the thirty-ear germination test will be open for entries and the same person may exhibit in all three if he desires. However, a separate exhibit of corn is required for each one.

Some of the things to consider in selecting the corn for an exhibit are:

1. Uniformity of length and size.
2. Maturity, indicated by stiffness of the ear and plumpness of kernel.
3. Straightness of rows.
4. Deep kernels in proportion to size of cob.
5. Tip well filled out.
6. Freedom from space between the rows.
7. Color of kernels.

Select your exhibit carefully and keep it in a cool, dry place until time for the corn show.

CORN EAR WORM

Considerable damage has been found in fields of sweet corn and flint corn, caused by the corn ear worm. This is often confused with the corn stalk borer.

The corn ear worm is hatched from eggs laid on the "silk" of the corn ear and the larva as soon as hatched commences nibbling on the kernels at the tip of the ear. When full grown, the caterpillar is 1½ to 2 inches long.

It will be appreciated if those who have had a great deal of trouble with this pest, would report it to the county agent.

The control measures are plowing the land in late fall or winter to break up the pupal cells where they have taken winter quarters from 2 inches to 5 or 6 inches beneath the surface. Poisoning the caterpillars early in the season on the corn plants is also sometimes practiced successfully.

VEGETABLE GROWERS

The Annual Meeting of the State Vegetable Growers' Association is to be at Horticultural Hall, Boston, at 10 A. M., Wednesday, Jan. 18, 1922.

The entire evening session will be devoted to business. In the afternoon the vegetable growers and fruit growers sections unite.

The speakers will be Prof. R. A. Van Meter of M. A. C., J. C. Hendrickson, a New Jersey vegetable grower, and one other speaker.

WITH THE HOME DEMONSTRATION AGENT

NUTRITION WORK

Two definitely planned Nutrition projects had meetings in November. One is with the entire trade class at the Mack Industrial School in Salem. The object of this is to improve the health of the girls. Height and weight records are being kept. Two discussions on "How to Keep Well" have been given. At our next meeting we are to begin the scoring of food habits.

At West Newbury, we were fortunate in having Miss Queal, the State Specialist in Nutrition. After an introductory talk, the women outlined their needs and a program was built up from that. This group are scoring the food habits of their families and will bring these in for discussion at our next meeting.

MENUS

Luncheon

Cream of Spinach Soup, Saltines
Italian Spaghetti
Lettuce or Cabbage Salad
Bread and Butter
Tea
Baked Apple Cream
Dinner

Pot Roast (reheated in gravy)
Mashed Potatoes
Creamed Onions
Pickles
Bread and Butter
Raisin Pie
Coffee Cheese

From McCollum's "The American Diet"

Dr. McCollum's book contains many menus for luncheons and dinners, which he calls "satisfactory" from the standpoint of nutrition. It is interesting to note how frequently milk and green vegetables are a part of these menus.

Winter Salads

Are you having enough Salads in your diet? Here is one that can easily be prepared by the farm woman and is delicious:

1 pint Chopped Cooked Beets,
1 pint Chopped Cabbage,
½ cup Grated Horseradish.

Mix thoroughly. Add any good dressing or the following mixture may be used:

2-3 cup Vinegar,
1-2 tsp. Salt,
1-4 cup Sugar,
Pepper, speck of Cayenne.

Raisin Salad

1 cup Chopped Raisins,
1 cup Chopped Peanuts,
1 cup Chopped Celery.

Mix with dressing and let stand for one-half hour before serving.

LUNCH FOR CHILDREN

A lunch should be planned so as to include:

- I. A SUBSTANTIAL FOOD, such as buttered bread, cottage cheese sandwiches or hard-cooked eggs.
- II. A JUICY FRUIT OR VEGETABLE, such as an orange, an apple, tomatoes, or cooked fruit.
- III. A SIMPLE DESSERT, such as baked custard, rice or bread pudding, or plain cake.

The above with either a glass of milk or a hot cream soup or other hot milk dish makes an excellent luncheon for school or picnic.

CONFERENCE AT AMHERST

Any one who has ever doubted that Extension Service had a definite work to do and a definite plan for its accomplishment, should have attended the conference of Extension Workers at Amherst. Speakers such as C. W. Pugsley, assistant U. S. Secretary of Agriculture, and Grace E. Frysinger, Field Assistant Home Demonstration Work from the Federal Office, outlined programs and plans for organization that were clear cut and most helpful to the future of the work.

The unit of work is to be the family: the father, the mother and the children. A community program is to be planned along this line and all agencies are to work together. Formerly, the County Agricultural Agent worked for the increased income through better crops, livestock, etc. The Home Demonstration Agent worked for better home conditions, and the County Club Agent organized boys' and girls' clubs to carry on certain farm and home activities. These three types of work will still go on, but there is to be directed effort toward unifying the work so that the entire family will be interested not alone in his or her particular project, but in each other's project as well.

NEW BOOKS

Productive Small Fruit Culture.

Sears.

Barn Plans and Out Buildings.

Orange Judd.

Domestic Science. Bertha J. Austin.

New Knowledge of Nutrition.

E. V. McCollum.

NOTE—In the last issue, two combinations for the midday luncheon were suggested. These were printed together as one menu. The first one ends with "gingerbread and apple sauce."

HINTS ON STAIN REMOVAL

The time to remove stains is before dust has settled in them.

In the case of a stain that cannot be accounted for, it is generally safe to assume that grease is a factor in it, and to treat the stain accordingly. For example, an ice cream stain is a combination of grease, coloring matter, and sugar. A grease spot may be removed in one of three ways:

1. It may be melted and absorbed. Example. Blotting paper and a warm iron as a means of removing paraffin.

2. It may be dissolved by means of gasoline, alcohol, or ether. The last is best for delicate colors.

3. It may be removed by changing it into an emulsion by means of an alkali such as ammonia.

Always work from the wrong side of the stain if possible.

The chief difficulty in removing stains is to avoid leaving a ring by letting the dirty liquid settle in the goods. To guard against this, put a pad underneath the spot, so that moisture will be promptly absorbed.

Rub from the circumference of the stain toward the center. It is more necessary to rub around the spot than on it. After rinsing do not fail to rub dry.

Fruit stains. When fresh, they may be easily removed by stretching the stained material over a bowl and pouring boiling water or boiling milk over it. When old, fruit stains may require the use of Javelle water.

FARM BUREAU

Through the co-operation of the Farm Bureau, the County Agricultural Agent and the Home Demonstration Agent have been invited to attend the community meetings being held by the Farm Bureau and to outline to the men and women present the purpose and possibilities of Extension Service. Two meetings have been held, one in Amesbury on November 10th, and the other in Haverhill on November 30th. Both of these meetings have shown results. At the Amesbury meeting, the women requested a traveling library. This has been sent to a rural section. The larger number of those who use the library will be Salisbury women. Two women at the Haverhill meeting expressed their interest in a possible project and it is hoped that a meeting of some of the women will soon be called, at which a real definite project may be organized.

Don't worry because the tide is going out—It always comes back.

When you reach the mountain top—wig-wag courage to the fellow in the foot-hills.

EXTENSION SERVICE ANNUAL REPORTS

REPORT OF AGENTS

The Annual Reports of the three agents have just been completed and sent to the U. S. Department of Agriculture, the Massachusetts Agricultural College and State Department of Education. Space does not permit the publishing of these reports complete but some phases of the work are as follows:

* * *

County Agricultural Agent

Committees, through which Extension Work could more effectively be done, were elected at community meetings held in the agricultural towns of the county last fall. Each committee man heads some project and the plan works out very satisfactorily.

A series of meetings were conducted to explain the fertilizer situation and advocate the home-mixing of chemicals as there was a saving of \$15 per ton by so doing. About 20 farmers mixed 80 tons as a result. Several demonstrations were given in home-mixing fertilizers that get results.

A number of crop demonstrations consisting of weed spraying, comparative tests of potato seed and varieties, etc. were carried but of especial interest were the demonstration plots of potatoes where meetings were held and accounts were kept of the cost of production. These plots contained a total of 6.8 acres which cost \$186.40 per acre, including labor and rent of land. The average yield was 254 bushels per acre.

In the spring a campaign of pruning and grafting fruit trees covered the fruit area of the county. A total of 13 pruning demonstrations were held with 103 in attendance. Also 5 grafting demonstrations with 77 people present.

Assistance has been given in improving the livestock by helping to place 15 pure bred dairy animals and 5 grades.

As a result of many farmers being without a market for their milk a movement was made to organize a co-operative dairy association. This is now in operation, handling about 1500 quarts of milk daily. This took a great deal of the county agent's time in holding meetings and assisting in looking up the market situation.

Exhibits were made at all fairs in Essex County, taking up about one-half the month of September. This exhibit represented several departments of the Agricultural School and had for its theme "Economy".

An Interstate Farm Tour was held in cooperation with the Rockingham County Farm Bureau with about 50 cars in the procession.

A total of 65 men purchased farmer's account books with the intention of starting accounts. A fair percentage of these accounts are being completed and will be summarized for the use of those who have completed.

A campaign of demonstrations in culling the non-producer hen was planned and carried out with the assistance of Mr. Carver, poultry specialist. Extension Schools in Dairying and Farm Crops were held in two towns. Cooperation was given the County Fair Association in securing and caring for live stock exhibits at their annual fair.

A field meeting of Holstein-Friesian breeders of Essex County was arranged and, at the meeting, preliminary steps for forming a county association were taken. Four carloads of Maine grown potatoes were inspected at the Aroostook farms and shipped here for seed. Other meetings, including the Annual Corn Show, seed testing, milk testing and individual problems are included in the program as reported.

* * *

County Club Agent

The period of Club Work ending December 1, 1921 shows some interesting results. Here are a few average examples.

The most popular agricultural club is the Poultry Club. Sixteen clubs were formed with a membership of 168 boys and girls. These youngsters cared for 425 hens which layed 2613 dozen eggs in the 7 months of the contest. The eggs sold for \$1699.94. The members also raised \$1370 worth of chickens and sold \$211.40 worth of dressed fowl. The total cost of feed, etc. for producing these items was \$670.67. The profit was \$2630.17.

The Canning Club Members canned 9659 quarts of fruit and vegetables at a cost of \$2742.28. Reckoning the value of these preserves at current prices as \$4573.45 the money saved by Canning Club Girls was \$1831.17.

The Garden Club profits amounted to \$1371.25. The Pig Club members reported a profit of about \$3.00 each per pig. Under the present conditions, they did well to break even. The 26 girls who did Bread Club Work, made 3154 loaves of bread; 343 pans of quick breads, and 63 other baked articles. Their profit was \$154.00.

In the Sewing Clubs, there were 177 members. They made \$576.27 worth of garments at a profit of \$298.81. Beside this, a great deal of mending work was done.

Summed up, the Club Work of Essex County paid. Its members turned out by actual work, products which were worth \$3384.65 over and above the cost of production to the mem-

HOME DEMONSTRATION

The figures given below show somewhat the extent of Home Demonstration work in Essex County. We are, however, far from being satisfied. Our aim is that the average home in Essex County may so use their time, energy and money, so increase their knowledge of how to keep well, that all members of the family may have a larger margin for community interests and service, for books, or other advancement and that members of these families may be contented and worthwhile citizens.

28 communities organized and adopted projects.

30 local leaders and 18 assistants to these leaders have assisted in this work.

6 communities have had food preservation demonstrations. 94 persons attended these.

3 communities adopted nutrition projects. 14 talks and demonstrations were given on this subject with a total attendance of 731.

361 demonstrations were given in some form of clothing work, either garment making, millinery or dress forms.

56 household account books have been placed in the homes.

2 of our travelling libraries are in use.

* * *

Planning Future Work

When organizing for future work, we hope that a community may call a meeting of those interested and that these women may plan their program of work according to the interests and needs of the majority. Also, when household management or nutrition is the project, we hope that we may have a number of Home Demonstrators. These are women in the community who carefully try out various methods and report to the others as to the value of these as time or energy savers, or, if a nutrition project, as to the results in the health of the individual or the family.

More and more, we are obtaining the cooperation of the community women in extending this work to others. In one community, the women who are fortunate enough to be included in the first group, are planning to give the same work to the Girl Scouts in their town. This is real Extension work.

members and the cost of the Club Work to the County. And how shall we estimate the value of the instructions which have been given all these boys and girls?

WITH THE COUNTY CLUB AGENT

CANNING CONTEST RESULTS

Champion is Groveland Girl

The girls who belong to the Canning Clubs of Essex County did a great amount of work during the past year. They put up a total of 4082 qts. of fruit and 5577 qts. of vegetables. The value of these products is \$4573.45 and the cost of preserving them was \$2742.28. In other words, our Essex County Canning Club members saved their mothers \$1831.17.

The basis of awards in the Canning Club is mainly the exhibit score or, in other words, the quality of the work rather than the quantity. Considering this fact, the County Champion in Canning for 1921 is Cora Doane of Groveland. Her story is copied below and tells in a better way her experience than another person could do.

"M. M. Club"

"In a small town lives a girl of fifteen. She is very different from the majority of high school girls in her town.

"She enjoys cooking, canning and sewing. A year ago last May she decided to join the County Canning Club so she filled out the blank and became a member. There were only a few that cared to join but none of the others completed the work. She had so much fun in the club work that she decided to rejoin the club the following year. She was the only one who entered the work at all that year.

"She began her second year's work by making nine jars of currant jelly. One morning she went to the garden and picked a peck of currants. She washed, cooked, and strained them. Then returning the juice to the fire and adding sugar, cooked the required time. After the juice would jelly as it should she poured it into jelly tumblers very much surprised to see six jars of bright, red jelly. Next she returned the juice to the fire after draining the currants the second time. When this was finished, she had three more jars of jelly to start her summer of work and pleasure.

"A little later when cherries were ripe, she put up six pint jars of them. Either the rubbers were not very good, or the wire was not tight enough, because soon after they were put up, one of the jars of fruit began to "work" so this left only five jars to exhibit.

"Soon raspberries were ripe and she canned six pints of them, also. Nothing happened to these.

"Then followed the canning of apples. So far she had very good luck with her canning, but here she met her first difficulty. The apples seemed to be full of juice and gas. This did not make a good combina-

tion for canning by the cold pack method because as the apples started to cook the jars turned "topsy-turvy" in the water. This, of course, is undesirable as the jars are quite apt to break. When they came out of the sterilizer, they did not look so bad however, except that the jars were only three-fourths full.

"The next canning she did, was three quarts of blueberries which came out very good as far as fullness and color were concerned.

"Then came string beans, shell beans, and succotash. These she did in two quart jars saying afterwards that it was not very profitable as the jars were heavy and hard to handle.

"Soon plums were ripe. They were harder to can as they must be peeled which takes considerable time. Finally the work was completed and she had ten more jars of fruit stored away for winter.

"At another time not long after this, she canned six jars of beets. These finished the canning of vegetables.

"Soon the peaches turned to red and yellow, a sign that they too, were ready to be added to her collection of fruits for winter use. Pears were the last things to join the row of jars in the fruit closet. She then labeled her jars and is now writing her story.

"I think one of the most interesting features of the Club work was the Annual Field Day at Hathorne. I went with the Haverhill people and had a fine time.

"As I am the only one in club work here in Groveland I call my club "Mono Member". Next year I hope I will be able to have a number of other girls interested enough so that my club will have more than one member.

"The motto which I have tried hard to follow is:

Stick to it
Stick to it
Do it
Don't give up,
You may have good luck,
So stick to it.

The peach tree borer is no longer an insect to be feared on account of the ease with which it is killed by a new substance called paradichlorid-benzine (in want of a simpler word). This is placed around the peach tree early in September and kills the borer without affecting the tree.

If interested write for definite instructions for application.

GARDEN WINNER CHOSEN

Haverhill Boy the County Champion

The 1921 Garden Club Contest ended November first. The percentage of members reporting was very good and the records showed that nearly all had made a good profit. Haverhill had the heaviest enrollment of any town or city in the County and was fortunate in having Ernest Howard, the Agricultural Supervisor in that city, act as a local leader.

The basis on deciding the awards was as follows: Profit 60%; Size of garden 20%; Story and Records 20%. The Champion decided upon was Kenneth Leighton of Haverhill. He had a garden 5400 square feet in size and made a profit of \$92.45 over and above the cost of manure, seed, plants, rent, etc.

He fails to mention the fact that he used 200 lbs. of commercial fertilizer and a load of manure in preparing his garden. His garden was located at a summer camp where he spent the vacation and he found a good market for the products with the surrounding campers. Here is his own version of the summer's work.

"The Story of My Garden"

"This spring I had my garden plowed about May first. This plot of land had not been plowed for eight years and was a ledgy piece of land. I tried to get one of the farmers who lived near my camp to plow my garden for me, but all were so busy that they could not find time. At last I found a man about four miles from my camp who agreed to plow. He came about four o'clock one afternoon. The land was so tough that it took all the afternoon to plow. After he finished he told me that he could not harrow because he was not allowed to drag a wheel harrow over the roads.

"The next day I got up early and took my rake and went to work smoothing over the plot and filling in the holes, so that I could plant my peas. It took all one morning to fill in the holes that the plow had left and rake over half the garden. I knew that if I waited much longer that I would be too late to plant my peas, so that afternoon I got to work and planted them. I planted two quarts that afternoon and another quart the next day. A little later in the season I planted my cucumber seeds about four feet apart in hills.

"Next I planted two quarts of butter beans and one quart of yellow eyes. My peas were coming along nicely now and as it was time to set out tomato plants I planted two dozen between my peas and two dozen in a clear space. About a week after I had set out my tomatoes I found that if I had

ALUMNI DIRECTORY

Class of 1918

Barnaby, G. Stewart, Florist and Landscape Gardener, Liberty St., Middleton.
 Bradstreet, Horton D., Farmer, Topsfield, Mass.
 Chesley, W. Lloyd, Milk Tester, Colebrook, N. H.
 Dow, William C., Herdsman, Lincoln.
 Howard, Ernest A., Agricultural Supervisor School Dept., Haverhill.
 Killiam, Dwight, Farmer, E. Buxford.
 Lewis, Wm. M., Asst. Mgr. Essex Co. Coop. Farm. Assn., Topsfield.
 Lovett, J. Houston, Student, Conn. Agri. College, Storrs, Conn.
 Perley, Ronald P., Farmer, Central St., Rowley.
 Perry, Fred L., Dairyman, 65 Lovett St., Beverly.
 Poor, C. Raymond, Glazer, N. H. Poor Co., Peabody.
 Putnam, Ralph S., Farmer, Burley St., Danvers.
 Ravell, Albert E., Chauffeur, 30 Bedford St., Lynn.

Russell, Leonard E., Market Gardener, 57 Endicott St., Danvers.
 Stevens, Harold C., Gardener, Washington St., Salem.
 Tarr, Philip V., Dairy Foreman, "Highwood", Manchester, Mass.
 Todd, Randolph II., Salesman, Inter. Harvester Co., 16 Flint St., Somerville, Mass.
 Trombla, J. Edward, Accountant, Stone & Webster Co., Peducah, Ky.
 Turner, Earl, Confectioner, Hayworth & Turner Ice Cream Co., Lawrence, Mass.
 Woodbury, Gordon F., Landscape Draftsman. R. & J. Farquhar Co., Boston, Mass.
 Bodge, Evelyn H., 65 Andover St., Peabody.
 Cook, Hope F., Clerk, 2 Duncan St., Haverhill.
 Curtis, E. Mabel, Clerk, City Hall, Salem.
 Hodges, Edwina, (Mrs. Irving Libby), 51 Jersey St., Marblehead.
 Russell, Louisa M., 57 Endicott St., Danvers.

DAIRY PRODUCTS

(Continued from page 1)

process, but has practically the same amount of protein, carbohydrate and ash as whole milk. It is not as rich in flavor as whole milk, but used in combination with other foods it forms a very inexpensive source of protein.

Cheese may be made from skimmed milk, whole milk, or whole milk and cream, and the richness of the cheese will depend upon the amount of fat left in the curd. In cheese we have a very compact and concentrated nitrogenous food. Weight for weight, it contains about twice as much protein as meat and there is no waste.

Cheese costs more than beans and less than most cuts of meat. Taking account of composition as well as cost per pound, we find that a given amount of money buys twice as much food value when spent for cheese as it would for beef.

By comparing the composition and cost of the various kinds of cheese, we find that in this country, American cheeses contain more nutriment at a lower cost than those of other countries.

Cheese can be made easy of digestion by grating and so render the particles small enough to be acted upon by the gastric juice. It is more easily digested raw than cooked. When cooked, it should be mixed with some starchy material and cooked at a low temperature, otherwise the little water it contains is driven off and the protein hardened.

SEASONAL NOTES

The newest development in orchard culture is detection of misnamed nursery stock by the leaf and twig characteristics.

What would you think if your wife left her sewing machine out of doors all winter. the same as you do your farm machinery?

A method of killing peach borers has been discovered which is proving very effective. It requires only a few minutes to apply and does not injure the tree.

Prune orchards, vineyards and bush fruits. Don't worry about the effect of cold weather for if the thermometer stands at 20 degrees below zero, no harm will be done.

Order fertilizers and spray materials. Most dealers will protect you against further drop in price and now is a good time to get such things in stock.

Get out vineyard posts, props for orchards, and stakes for raspberry plantations.

GARDEN WINNER

(Continued from page 6)

set them all out in the rows between the peas they would all have lived. Those that I had set out in the open plot I found that four out of the two dozen had died. About the third week in May I planted my potatoes. I started one morning and planted three bushes.

"As the morning was not gone yet, I put my corn and small things in the ground, such as radishes, beets, turn-

HONOR STUDENTS

For First Quarter of 1921-1922

The students are taking great interest in the credit system now in operation at the school. By this system a minimum of 15 credits is required each term and a possible maximum of 21 credits may be earned.

The list below shows forty students who have, by careful application to school work, obtained at least one credit more than the minimum number required, and are therefore entitled to a place on the Honor List:

Theodore L. Bense, IIC Federal, Melrose, 21.5 credits; Nelson E. Cronk, IIC, Marblehead, 19.6 credits; Benjamin F. Burns, IIC Federal, Ipswich, 19.2 credits; James F. Wood, IIC Federal, Middleton, 19.2 credits; Anthony P. Amaral, III Federal, Danvers, 18 credits; Andrew Coukos, IB, Lynn, 18 credits; Spencer E. Hunnewell, IB, Saugus, 18 credits; Harold A. Wilson, IIC, Haverhill, 17.8 credits; Paul E. Brickett, III, West Lynn, 17.7 credits; Walter E. Moore, III, 17.7 credits; Oliver E. Holmes, IIC, Swampscott, 17.6 credits; Leon Crosman, IIC Federal, Middleton, 17.6 credits; James F. Duncan, III Federal, Gloucester, 17.5 credits; Arnold C. Oulton, II, Swampscott, 17.4 credits; Harold C. Wolfram, II, Marblehead, 17.4 credits; Hugh C. McGrath, IIC Federal, No. Chelmsford, 17.3 credits; Richard F. Welch, IIC Salem, 17.3 credits; C. Donald Anderson, III, East Lynn, 17.2 credits; Philip A. Peabody, IV, Swampscott, 17.2 credits; Robert V. Deyernmond, IIC Federal, Andover, 17.2 credits; Edwin E. Stackpole, III Federal, Danvers, 17.2 credits; Alton G. Perkins, III, East Lynn, 17 credits; Howard Martin, IIC Federal, Danvers, 17 credits; Howard Barnes, III, Swampscott, 16.9 credits; Daniel A. Peach, IV, Marblehead, 16.8 credits; Robert A. Ewing, III, Haverhill, 16.7 credits; Evan B. Roberts, IIC, Topsfield, 16.8 credits; George A. Hall, IIC Federal, Marblehead, 16.6 credits; Herbert S. Whittier, IIC, Ipswich, 16.6 credits; Forrest E. Carter, I, Wakefield, 16.5 credits; Lindreth Roberts, I, Topsfield 16.5 credits; Kenneth Wilson, I, Rockport, 16.5 credits; Edward P. Ryan, IIC, Swampscott, 16.4 credits; James H. Curran, II, Danvers, 16.4 credits; C. Brooks Dwyer, IIC, Bradford, 16.4 credits; Helen I. Fall, II, Methuen, 16.2 credits; Ernest I. Robinson, IIC, Methuen, 16 credits; Maxwell S. Roberts, III, Newbury, 16 credits; Irving I. Nichols, I, Gloucester, 16 credits; Wesley W. Wood, I, North Andover, 16 credits.

ips, and carrots. I sold my vegetable products to the campers for which I received a good price, I could sell everything that I had. My best success was with cucumbers, but later in the season they blighted, so I lost quite a lot of money."

HOMEMAKING DEPARTMENT

The girls in the "Little Red House across the Street," have been very busy this fall proving that it is a Home Making Department in every sense of the word, Home. Seventy-one students have been able to make themselves and their instructors comfortable and happy in spite of crowded conditions and limited equipment.

The new dresses and hats which have been made by the older girls under the careful instruction of the sewing and millinery teachers, are a credit to each one of them, while the younger girls have been patiently learning to make aprons and the more simple garments.

The kitchen is always a favorite place, and the odors which come from there after the girls have begun their morning cooking lessons, serve as an advertisement for the lunch room, which is always full during the noon hour.

Since a home is a place in which to play as well as work, the home-making girls are taught to entertain in order to make home attractive. A dinner was given to the Board of Trade Association of Essex County, at which the girls demonstrated their ability to prepare and serve a dinner. The senior class gave a banquet which they prepared themselves, to the Football Squad, and the boys pronounced it a great success.

On the afternoon of December sixteenth, the day on which the school closed for the annual Christmas vacation, the Junior class planned and executed a Christmas entertainment followed by a Christmas tree to which everyone connected with Essex Aggie was invited, and nearly every one must have accepted the invitation judging by the enthusiastic gathering in the large assembly hall of the main building.

Several nurses from the State Hospital are receiving academic instruction five afternoons each week, in the class rooms of the Homemaking Department.

The severe ice storm of December fifth and sixth interfered greatly with transportation facilities, but half of the student body and all of the instructors were present on both days. The school was handicapped however, for several days because of no telephone connection or electricity for lights or stoves.

The Board of Trade Association of Essex County has presented the girls of the Homemaking Department with a fine new basket ball which the school greatly appreciates. Time is being given to basket ball practise on three days a week, and much interest is being shown by both teams.



Essex Aggie 1921 Football Players

BROKEN TREES

(Continued from page 1)

into place with a block and tackle and bolted fast. The split crotch will usually decay after a while, but some valuable crops may be harvested in the meantime. In other cases it may be best to remove the broken branch and smooth the wound to keep decay out of the trunk as long as possible. The part of the tree now standing will last longest under this treatment.

Breakage in young orchards is not so widespread. A young tree will often reconstruct one side of the top if the trunk is not ruined. A scaffold branch that is split off with a large part of the trunk may be fitted snugly into place and if it is bolted firmly the branch will often grow fast, the bark "grafting" itself across the split and laying successive layers of new wood over it. In such a case the crotch must be made water-tight.

Peach Trees Recover Rapidly

Vigorous peach trees that are badly broken recover rapidly. Those of you who remember the great storm of 1898 will remember also the remarkable way in which some of the peach orchards, with little but the trunks left standing, reconstructed their tops and within three years became bearing orchards again. The root system is as good as ever and the severe pruning is followed by a wonderful growth.

No matter what is to be done, you have until spring to think it over. In matters of judgment second thoughts are said to be more sound than conclusions hastily drawn.

R. A. VAN METER,
Extension Fruit Specialist.

SCHOOL NOTES

The Senior Class of girls gave a banquet to the Football Squad on the evening of December 8th. About thirty men were present and a fine banquet was served after which games and dancing were enjoyed. Herman Herrick (1921) was presented with a gold chain and football charm in appreciation of his faithful work with the team.

The following editors were elected by the Forum Club to prepare the "Green and White" (1922) Editor-in-Chief, R. Stevens; Assistant Editor, A. Bryer; Business Manager, C. Wainwright; Asst. Business Manager, Miss Cummings; Alumni Editor, E. Jones; Joke Editor, G. Woodman; Class Artist, R. W. Knight; Class Note Editor, O. Sargent; Athletic Editor, H. Holden; Faculty Advisor, Mr. F. L. Hannaford.

School closed on Friday, December 16th for a two weeks vacation. For the last afternoon the Class of 1923 prepared an excellent entertainment and Christmas tree. It was one of the most enjoyable afternoons of the year. Everyone had a good time thanks to the energy of the hustling Junior class members.

Captain Harold Holden of the football team was the recipient of a large basket of fruit which was sent to him by his many friends at the School.

At the Boston Poultry Show the Essex Co. Poultry Club team won third place in a killing and picking demonstration. Donald Anderson and Alton Perkins both of Lynn and juniors at Aggie made up the team. Both are receiving much commendation.

ESSEX FARMER AND HOME MAKER

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HATHORNE, MASS., MAY, 1922

No. 2

THE PRUNING AND SPRAYING OF TREE FRUITS

Too Much Cutting Reduces Production. Thorough Spraying Increases Quality

A little thinning and minor cutting back to form a desirable framework and prevent bad crotches in young apple trees prolongs life and makes far better trees. The removal of a little wood will not materially reduce the size of the tree or delay its bearing. On the other hand, experiments show that severe pruning of young trees delays bearing and reduces production.

The tree is permitted largely to shape itself. Three or four or sometimes only two, branches are left when the tree is planted; more than this is likely to result in crowding and splitting as the tree grows. Two feet is a good height at which to start the head. Bearing age is considerably delayed by cutting off the lower branches in order to secure a high-headed tree.

As the tree grows older, branches that appear well apart on the main branches are retained and pruning is largely confined to the removal of interfering or crowding branches. All but one of the shoots of bad crotches are headed in so they will become secondary branches.

The spraying campaign is usually begun before growth starts and the first application of strong lime-sulphur, 1 to 8 or 10, is given all the plantations, except the strawberry and the grape. After this the treatment is different for the various kinds of fruits. The core fruits, apple, pear, quince, are given a second spray of dilute lime-sulphur, 1 to 40 or 50, to which is added three pounds of lead arsenate. This is applied just after the cluster buds of fruits blossoms have separated and before the blossoms show very much pink color. This is for scab, curculio and the bud moth. When the petals have fallen this is repeated. The same pests are being combated and in addition the codling moth is controlled. This last is perhaps the most important of the summer sprays and its value depends upon the time and thoroughness of application. It should be given within a week after petals fall, if applied much later results will be unsatisfactory. Needless to say it should be applied thoroughly to the whole tree. If scab is very prevalent a third application of the dilute lime-sulphur may be found necessary, but generally two sprayings if given in time and applied prop-



Students at Work Pruning Young Apple Trees

erly will be found sufficient for well-cared-for plantations.

The stone fruits such as peach, plum and cherry require a little different treatment. The early spray of strong lime-sulphur already referred to is for control of San Jose's scale, leaf curl and brown rot. When the shuck or dried portion of the flower is being shed a spray of lead arsenate 3 pounds to 50 gal. water, to which has been added 2 or 3 lbs. of good lump or stone lime will be found valuable for control of curculio. Two weeks later spray with self-boiled lime-sulphur to which has been added 3 lbs. lead arsenate. This serves to control curculio and brown rot. If the latter pest is prevalent a second application must be made, not later in the case of peaches than one month before ripening; cherries and plums may be sprayed later as the lime will not stick to them as it does to the fuzzy peach.

The best contact spray for plant lice, crawling young of scale insects, etc. is Nicotine Sulfate known commercially as "Black Leaf 40" 3-8 pint per 50 gals. for the dormant sprays and $\frac{1}{2}$ pint per 50 gal. for the foliage sprays.

CALENDAR

August 2-5—Mass. Vocational Agricultural Teachers' Conference at Hathorne.

Write to Division of Publications, Department of Agriculture, Washington, D. C. for Bulletin No. 861, "Removal of Stains from Clothing and Other Textiles."

CORN AND VEGETABLE SEED SHOW

Held at School March 16

Seed is one of the factors on which depend success or failure in agriculture. Poor seeds are expensive at any price and good seeds are a profitable investment even at a much increased cost, because a small per cent. of gain in the total value of the crop (obtained by using better seed) far exceeds the cost. Good seeds have been and are being grown in our country. The Essex County Corn and Vegetable Seed Show is being conducted to further encourage the development of better strains of seeds.

The vegetable seed section which was an improvement over last year's show can be further increased and made worth while if the growers desire. The plan was not only to show the seeds but a germinated sample, and in case of the biennials, specimens of the roots or bulbs grown from the same strain of seed. Several growers responded with exhibits of seeds and seed stock. The germination tests not only revealed the number of live seeds but showed very plainly the vigor of the young plants. Of course, vigorous plants producing poor quality vegetables are not desired, but here the exhibit of roots and bulbs showed the quality that the seed would produce. A notable student exhibit in this section was that of John Ross, 1924.

(Continued on page 7)

ESSEX FARMER and HOME MAKER

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

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SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

April 28—Class room work for the
Agricultural Department discontinued.
Project work begins.

April 28—Arbor Day exercises.

June 1—Parents' Day at Homemaking
Department.

August 2nd to 5th—Mass. Vocational
Agricultural Teachers' Convention
at the School.

August 16—Summer Field Meeting
Chebacco Pomona Grange at the
School.

EDITORIAL

Enrollments for the succeeding year are coming in in a most satisfactory manner. In fact, we have a larger waiting list at the present time than at the corresponding time last year or any previous year. It is already very apparent that we shall probably have to refuse a considerable number of applicants.

RESIGNATION

It is with sincere regret that we announce the resignation of County Agricultural Agent R. M. Stiles. Mr. Stiles joined the staff as dairy instructor June 1919 and served us conscientiously in that capacity until April 1920, when he was elected County Agent. He was a very successful County Agent, meeting people in an affable manner and making friends wherever he went. His success in conducting his varied work has merited the commendation which he received from the authorities. The Trustees and Staff feel that the work was handled in an able and conscientious manner. We regret his resignation but feel that the dairymen of the county, for whom he will continue to work, will be the gainers and consequently the agriculture of the region, as a whole, will receive its proportionate benefit. We wish him success.

FEDERAL STUDENTS

During the past year the School has extended instruction to 32 Federal

students who have been recommended to us by the Veteran Bureau. These have been in the main, a very earnest, sincere set of men. They have taken up the work of retraining in agriculture in a hearty, energetic manner. With the closing of School they have gone to their summer agricultural projects and it is a matter of real joy and satisfaction to the School to see the valuable projects which they are conducting and the manner in which they are conducting them.

Incidentally, it should be mentioned that a large percent of these men took ranking positions in the honor roll for scholarship during the year. This is, of course, remarkable from the fact that these men have not been engaged in actual study for several years past.

NEW COUNTY AGRICULTURAL AGENT

The Trustees of the Essex County Agricultural School have elected Bertram Tomlinson of Washington County, Machias, Maine, to the position of County Agricultural Agent. He will be a member of the regular Extension Staff of the School. He was selected from a large field of candidates and has the approval of the Department of Education and the Extension Service of the Massachusetts Agricultural College.

Mr. Tomlinson was born in Needham, Mass., and graduated from the Smith Agricultural School at Northampton, Mass. He was then employed as field agent on the Faunce Demonstration Farm at Sandwich, Mass. He was responsible for the growing of field crops, forage crops and the handling of live stock suitable for Barnstable County. It is interesting to note that the County Agricultural Agent and Farm Bureau service of this state had its origin and was an outgrowth from the work of this demonstration farm. From Cape Cod, Mr. Tomlinson went to Livermore, Maine, where he was connected with a large dairy farm.

Mr. Tomlinson completed a course in agriculture at the College of Agriculture, University of Maine, Orono, Maine, in 1918. He then became poultryman at the College plant, resigning to enter the U. S. Army. Upon his discharge, he was appointed agricultural teacher in the Concord High School and later received an appointment as County Agricultural Agent for Washington County, Maine. He has held this latter position two years. Mr. Tomlinson is married. He will join the staff of the School about May 1st and immediately take up his duties.

Mr. Tomlinson has had experience in the various lines of County Agent and demonstration work. In his last position he had experience in dairying, livestock feeding, milk testing, silo

ELECTION OF ATHLETIC ASSOCIATION OFFICERS

Football Schedule Announced

At a recent meeting of the School Athletic Association the following officers were elected for the coming year:

President—W. R. Murray.
Vice-President—Wilfred Jordan.
Secretary—Esther Bryer.
Treasurer—Mr. Mostrom (Faculty).
Assistant Treasurer—Maxwell Roberts.

Historian—C. Dreano.

Cheer Leaders—W. Jordan, E. Bergstrom, Esther Bryer.

Executive Committee—W. R. Murray, Esther Bryer, Mr. Page (Faculty).

Mr. Oral A. Page, football coach, and member of the Faculty, has already arranged a schedule of nine games, of which five will be played at home. Wakefield and Manchester are new teams on this year's schedule. As usual, the big game will be with our nearby rival—Danvers, and much is expected from their intensive campaign last fall.

Our county rival, Norfolk Aggie, will do well to fortify herself well, as Essex is out for revenge. Also Methuen, Pinkerton, Newburyport and Amesbury will give us the stiffest kind of football, particularly Methuen, as it will conduct a preliminary camping trip of a fortnight to condition its men. There is a possibility that Salem Normal will have a football team next fall. If so, Essex will play them.

Football Schedule 1922

October 7—Wakefield High at Danvers.

October 14—Pinkerton Academy at Derry, N. H.

October 21—Newburyport High at Newburyport.

October 27—Methuen High at Danvers.

November 4—Manchester High at Danvers.

November 11—Amesbury High at Amesbury.

November 18—Norfolk Aggies at Walpole.

November 24—Salem Normal at Danvers (pending).

November 30—Danvers High at Danvers.

building, handling of sheep and swine, poultry demonstration, spraying, pruning and particularly the handling of potatoes and field crops. He has had considerable work in the organization of co-operative associations. In his last position Mr. Tomlinson was responsible for boys' and girls' club work, as well as county agricultural agent work with adults.

WITH THE COUNTY AGRICULTURAL AGENT

TREE FRUIT SPRAYS
THE DORMANT OR DELAYED DORMANT SPRAY. Lime-sulphur may be used as a caustic spray on trees which are free of foliage and which are infested with scaly insects like San Jose scale, oyster shell bark louse, blister mite, scurfy scale, peach leaf curl, etc. at a strength sufficient to kill these pests without injuring the plant. The commercial mixture, which can be bought ready made at low cost should be diluted with 9 gallons of water. The home made mixture may also be made up as a concentrate using 20 lbs. of lime and 10 lbs. of sulphur in 50 gallons of water. Prepare as follows: put all the lime and sulphur together in a large kettle, add water to slake the lime, then add the portion of water necessary. Apply heat and boil the mixture 45 minutes or longer, until a reddish-orange color is produced. Partially cool, add enough water to make the total up to 50 gallons and apply at once. The addition of Nicotine Sulfate, "Black Leaf 40" to the delayed dormant spray, 3-8 pint per 50 gallons will kill the first plant lice and the crawling young of the scale.

THE SUMMER SPRAY. Lime-sulphur can be used as a summer spray when trees are in foliage, if proper dilution is made. The commercial mixture should be diluted so that each gallon will carry 50 gallons of water. The home made mixture for summer use on apples, pears, plums, peaches and cherries, may be made by only partially cooking 8 lbs. of sulphur and 8 lbs. of lime in a limited quantity of water, taking care not to "burn" and then add water to make 50 gallons of the strained solution. Prepare as noted above for home made mixture except no heat is required and the mixture is allowed to cook only 15 minutes or as long as the slaking lime furnishes heat.

Either of the summer sprays should be reinforced with arsenate of lead, 1½ lbs. powder, 3 lbs. paste, to each 50 gallons of diluted spray, also "Black Leaf 40" ½ pint per 50 gallons, to control the plant lice. Make applications as follows: first, before the trees blossom but after the buds have burst and many small leaves appear, the so-called pink spray; second, just after the trees are through blossoming, the calyx spray; third, ten days or two weeks after the second application.

The lime-sulphur is effective for leaf spots like apple scab, the brown or summer rot of plums, cherries, and the leaf and fruit spot of the pear, also black knot, apple canker, etc. Arsenate of Lead is effective for the bud moth, codling moth and the cat-

terpillars of the gypsy moth, brown-tail and the tent. Whale oil soap, 1 lb. to 4 gallons, or 10 per cent. kerosene emulsion, or dilute miscible oils, can be used in place of "Black Leaf 40" for plant lice or the Pear Psylla.

With respect to application, it should be noted that a good spray pump carrying high pressure, 25 feet of hose and a spray gun or rod tipped with a good nozzle are imperative for good work. Do thorough work!

The home made mixture is a little cheaper than the ready made but is scarcely to be preferred unless one has an equipment and time for making the mixture. Lime-sulphur will keep indefinitely in any strength so that a surplus of any purchase or preparation would be good any time if not allowed to freeze or dry out by exposure to the air.

RECENT MASSACHUSETTS BULLETINS RECEIVED AT THE SCHOOL LIBRARY

("Raspberry Growing" and "Farms For Sale" are now available.)

Mass. Bulletin No. 25, "Raspberry Growing in Mass.," by S. Lothrop Davenport.

"Massachusetts Farms For Sale." This bulletin gives a brief description of the properties listed.

Mass. Bulletin No. 31 "Insect Enemies of Vegetable Garden Crops."

Mass. Bulletin No. 15, "Practical Suggestions for Raising Turkeys."

These bulletins may be obtained by writing to John W. Plaistead, Director Division of Information, State Dept. of Agriculture, State House, Boston, Mass.

SPRING MANAGEMENT OF BEES

On the first warm day, look at your bees and see if they have sufficient stores to carry them through brood rearing until they can bring in nectar from the field. If it is necessary to feed, use honey from a known source or white sugar and water, equal parts. Feed directly over the swarm in an empty super, being careful not to cool the brood. The success of your season depends on your having a hive full of bees at the beginning of the honey flow. Do not feed so much syrup that the space for brood rearing will be limited. Feed small amounts at frequent intervals; it will stimulate the swarm, cause the queen to lay with greater vigor. Are your bees bringing in pollen? If not, feed bran flour in a saucer as a substitute for pollen. See that your bees have water placed in a warm location. A young vigorous queen—sufficient stores—pollen and water—means a hive full of bees at

RULES FOR THE FEEDING OF YOUNG CHICKENS

Instruction Sheet for Poultrymen 2 to 7 Days Old.

First feed grit—Next dip bill of each chick in warmed milk and place chicks under hover. Place warmed milk and water in mounts raised on boards around the hover. Make circle of wire around the hover one foot from the edge. This should be used for 3 days. Feed chix scratch grain on newspapers 5 times each day, feeding what they will clean up in 15 minutes. This should be fed at 7, 9, noon, 2:30 and 5 P. M. Use clean paper each time.

8 to 21 Days Old.

Keep grit and shell before chicken. Feed scratch 7 A. M., noon and 5 P. M. in straw litter. Feed milk mash with chopped green feed in shallow trays at 10 A. M. and 2:30 P. M. what they will clean up in half hour. Turn into cold nursery or outdoors on the 8th day. At the end of 14th day lower temperature of hover to 85, and place milk mash before them all the time. Keep clean milk and water before them all the time.

22 to 6 Weeks.

Mix milk mash and growing mash together and then after a few days put them on regular growing feed. Mix chix scratch and growing scratch at end of the 5th week and at end of the 6th week put them on regular growing scratch. Keep mash in self-feeding hoppers before chix at all times.

Don't Over Feed.

Don't Give Cold Milk or Water.

Keep Milk Before Them.

Don't Chill or Over-Heat.

Don't Let Them Crowd.

Give Plenty of Exercise.

Care of Brooder Stove (Magic)

7 A. M. Shake fire until red ashes show in pan. Push down fire with poker and add 2 shovel of coal; first burn for 5 minutes with front off, then replace front and fill fire box two-thirds full of coal.

Dump Ashes When Fixing Fire

NOTE—On cold days it may be necessary to add coal in latter part of afternoon.

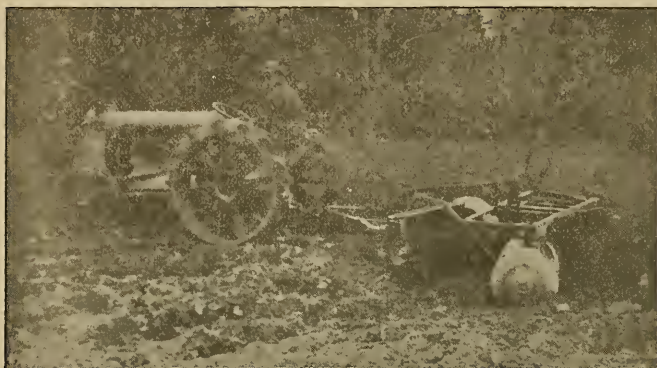
5 P. M. Shake fire, etc., as in the A. M.

9.30. Look at stove.

Be sure no coal falls on top damper. Don't shake fire too much—leave grate level.

Look at fire when feeding.

the commence of the honey flow and a hive full of bees in the fall. Do not chill the brood by handling on cool days. Do not unpack until the first week in May.



Using Tractor to Prepare Land For 1922 Potato Crop

FEDERAL STUDENT, M. NORMAN LIBBY, PLEASED WITH VOCATIONAL TRAINING

Mr. M. Norman Libby, now living in Everett, Mass., has been a student at the School for the last two years. He is a member of a group of special students assigned to Essex Aggie by the Federal Board for Vocational Training in Agricultural. Mr. Libby is specializing in dairying and farm crops and is a candidate for a diploma.

This young man left his home in Maine on October 2, 1917, to enter the army. After one month at Camp Devens and three months at Camp Gordon, he was sent overseas with Company C, 327th Infantry, 82nd Division. His company was engaged in the fighting near Meuse Argonne, and it was here that Mr. Libby was wounded and gassed. Only ten in the company of 250 survived the Argonne. He was discharged from the service May 28th, 1919.

After working for about a year and a half his health began to fail and he obtained government compensation, coming to Essex Aggie for training. Mr. Libby is very enthusiastic about farming, especially since he is able to put his knowledge to practical use on a large farm which he has recently purchased.

The picture at the top of this page shows him preparing land for potatoes which he has previously cleared of rocks. Last year his potato patch covered 25 acres. The middle picture shows the student with his first pure bred. There are very few good dairy animals in his particular section, and Libby intends to combine dairy farming with the system of raising only cash crops, which now exists in his locality.

The lower picture shows how the product is transported from the storehouse on the farm, to the cars in which the potatoes are shipped to Essex



Libby and his Pure Bred

SUMMER SCIENCE PLANS

The expression "summer science" has been used so frequently the past year that most of the students at Essex Aggie will have become somewhat familiar with it. What does the term stand for?

Agriculture has to be learned, in part at least, by doing agricultural work. A vital part of the agricultural training is the summer project where one learns to do by doing, under practical conditions, either at home or on a so-called substitute project. Why should we not learn science most easily under similar conditions? The best part of the year for learning science is the summer. The science problems are the problems which are continually arising in connection with the agricultural work. The time to study birds, flowers, soils, trees, insects, weather and other fields of science is in connection with one's project. In other words, it is just as important to have a summer project, or problem to solve in science as it is in connection with the practice of agriculture.

To further interest along science lines, each student has been asked to elect a set of science problems to work out during the summer. The Science division is to supervise the work during the summer by making as many visits as possible to encourage and assist the students in carrying out their choice of work, and it is planned to spend some time in the fall term in "rounding up" the summer's experiences. A science "fair" is a possibility. It is likely that additional graduation credit will be given for satisfactory work accomplished and it is hoped that the program as outlined will tend to make Science a most vital and interesting part of the course at Essex.

county farmers for seed. Libby is the agent as well as grower and is successful in marketing his produce direct to the farmer.



WITH THE HOME DEMONSTRATION AGENT

LAUNDRY NOTES

Why is there such a difference in the appearance of the finished laundry of Mrs. White and Mrs. Brown? Mrs. White's clothes are a clear white and have a pleasant odor. Mrs. Brown's clothes are a gray-white and have an unpleasant odor. Mrs. Brown is troubled because of this appearance. She scrubs harder than ever the next week, or, if she has an electric washer, she runs it a little longer each week. But there is no improvement in her clothes.

Nine times out of ten the answer is that Mrs. Brown does not rinse her clothes enough. Often, less scrubbing and more rinsing would result in cleaner clothing.

Rinsing is very important. Clothes should be free from soap before bluing. The first rinsing water should be warm, or the soapy curd will harden on the clothes. A second, and sometimes even a third, rinsing water is desirable. It is careless rinsing that leaves a bad color and no amount of bluing will cover it up.

Sunshine and fresh air are most valuable in bleaching and purifying clothes. To aid in the bleaching, put clothes out without wringing, or let them lie on the grass and moisten them frequently.

If the laundry is so hung that the threads are straight, and the article in the shape desired when finished, it simplifies the rest of the work. Then, if ironing for every piece is not advisable the clothes are straight, sweet and sun dried, ready to wear or use without any further work except folding. Many people prefer the odor of sun dried clothes, especially for knit underwear, towels, sheets and pillow cases.

Homemade Soap

Fats, that are not fit for food and are too dark to use for further deep frying, may be made into soap at a saving of about 75% over an ordinary grade of commercial laundry soap. The following rule has proved most satisfactory, yielding a hard soap containing very little free alkali:

- 5 lbs. luke warm melted grease
- 1 can (lb. can) lye
- 1 qt. cold water
- ½ c. cold water
- 3 tbsps. borax
- ¼ c. ammonia
- 2 tbsps. sugar
- 1 tsp. salt

Dissolve the lye in the cold water and let stand until cool, then add the fat slowly, stirring constantly. Mix the other ingredients together and add to the first mixture. Stir the whole until thick and light colored. Pour

into a pan lined with cloth. Mark in to pieces of desired size before the soap becomes hard. When hard, break the pieces apart and pile in such a way as to insure free circulation of air in order that the soap may dry out well before using.

Javelle Water

Javelle water is a good bleaching agent. It should not be used on colored materials.

- 1 lb. sal soda or lye
- ¼ lb. chloride of lime
- 2 qts. cold water

Mix thoroughly, let it stand several hours. Pour off clear liquid and bottle for use. Keep in dark, cool place.

To use Stretch the stained article and rub liquid into it. Rinse in clear water and rub if necessary. Always rinse last in ammonia water until all odor of lime is gone.

SPRING CLEANING TIME

Now is the best time of the year to simplify our ways of living. Are all our ornaments and bric-a-brac worth the time it takes to care for them? Have we been saving things for years that are neither useful nor beautiful, and using our time and strength to care for them? Do we realize that a room that is not crowded with furniture, pictures and ornaments is more beautiful and restful than the average family living room?

Let elimination be the first word in our spring cleaning.

Topsfield is to have a community meeting to plan their future projects in Extension Service Work. It is hoped to outline a program and choose leaders for the remainder of this season and also one that will carry over through 1922 and 1923.

NUTRITION WORK

Under the direction of Home Demonstration Work, North Haverhill and West Newbury are carrying on adult nutrition projects and studying "Food for the Family." South Peabody wishes to organize for the same.

North Andover has adopted the "Nutrition Work for Children" as a part of the regular school curriculum. The Superintendent has asked all of the teachers to consider this work as the regular Hygiene program. The Home Demonstration Agent meets with all of the teachers once a month and plans the work with them. In this way, all of the schools in the town are reached.

Do you know that a correct diet is the best means to build up resistance and to prevent frequent colds and headaches?

THE CANNING BUDGET

Questions

How much shall I can this year to feed my family well?

Does it frequently happen that toward spring you find you have a surplus of some kinds of products and too little of others?

Canned goods are used during at least seven months of the year (about 200 days).

Suggestions for Estimate

First, consider vegetables. How many times in the month do you wish to serve tomatoes? Eight cans per month would allow for about two cans per week. Suppose you decide that eight cans per month is sufficient, then multiply this by 7 and you have 56 cans of tomatoes for the year. Then consider greens, corn, peas, beans, etc., the same way. Allow a generous amount of tomatoes and greens, as these are especially needed in our diets.

The budget for fruit, meats, soups, jellies, pickles and relishes should be made the same way.

Then the housewife has a definite plan for her canning. Her family will be better fed and her work will be more interesting.

EXTENSION SCHOOL AT WEST ANDOVER

On March 3rd, the women of West Andover met for an all-day meeting to discuss homemaking subjects. Perhaps the most interesting part of the day's program was that taken by the local women. They told the other women about favorite household utensils. An especially good long-handled mop for floors or walls was brought and demonstrated. A hot water canner was described and its uses other than canning given. The fireless cooker, a favorite egg beater, cork screw, jar lifter, etc., were described, and, in most cases, exhibited.

Dr. Simpson, District Health Officer, spoke on "How to Keep Well." The subject of "Invalid Cookery" was discussed by the home Demonstration Agent.

HOME-MADE SILVER POLISH

- 5 lbs. Paris White or Whiting (Paris White finer)
- ½ box Pearlina or any other good Soap Powder
- 2 oz. Castor or Sweet Oil
- Dissolve Pearlina in 1 quart of Boiling Water
- Cool
- Stir in Paris White or Whiting
- Add Castor or Sweet Oil

WITH THE COUNTY CLUB AGENT

CLUB MEMBERS HATCHING EARLY

State Poultry Leader Nodine Pleased With Our Poultry Clubs

"Hatch Early" is the by-word among our boys and girls who are Poultry Club members. During a recent visit by Mr. Nodine from M. A. C. several clubs in the northwestern corner of our county were fortunate to have him present at their meetings. Each member reported progress and several striking conclusions were drawn from the results of these reports.

It was agreed that this month each club member should hatch some chicks, if his home conditions permitted, clean his poultry house and yard, and preserve surplus eggs for next winter. These three operations were discussed fully and many new ideas were introduced. Several man-sized jobs are being handled by some of the members. A Methuen boy has 110 birds, uses electric lights and has made a big profit. A Methuen girl has 8 birds on which she has cleared \$20.00 so far. A boy in Andover has 100 pullets which he raised last summer and has made a good egg record. Lynnfield has a girl poultry club member who takes care of 200 birds.

The contest is over on June 1 and the next issue of the "Essex Farmer" will contain the highest scores.

HANDICRAFT FOR BOYS

Club Shows Skill in Woodworking

The Junior Extension exhibit on Farmers' Day at the Essex County Agricultural School March 16 was made up mostly of various articles made by members of handicraft clubs. Amesbury, Andover, Beverly and Middleton contributed to the exhibit. The articles were of wood and varied from aeroplanes, and plant sticks to paper knives and tool chests. The work showed evidence of real skill in the use of tools and originality of ideas. Several articles were made of reed and represented a great deal of work.

Beverly specialized in chair caning, showing two methods of reseating with cane. By one method the woven cane bottom is bought in a piece and the edges are wedged into a channel in the chair seat and held in place by a heavy reed which is driven into the channel. Middleton sent several fine pieces of reed work, baskets and trays worth several dollars being included. An Andover boy probably had the best work of any individual. Charles Remick is an Andover boy and is naturally an efficient wood worker. He showed a book rack and a hat tree which attracted much attention and praise. He also had repaired a sled and made some other articles which were shown. Among these was a tiny mantel clock.

It was made of oak finished in a golden shade and contained a small clock with a dial 2 inches in diameter. This article probably attracted more attention than any other in the exhibit and deserved the praise it received. Charles has built a model poultry house at home for his flock of birds. The house is a fine example of construction work and is made of good material. It houses the flock with which he is competing in the poultry club contest. An Amesbury boy begged a piece of mahogany from his father and designed a unique tabourette, carefully planning to use all the wood without unnecessary waste. The work was well done and the finished tabourette was a feature of the exhibit.

NOW'S THE TIME TO START THE GARDEN

Even a Small One Will Often Pay Big

The value of having a vegetable garden that will supply the table during the growing season with a bounteous amount of fresh garden produce cannot be estimated. A plot 100 by 100 feet properly planned, planted and cared for, should produce a good supply for table, winter storage and canning.

It is possible to make the garden pay big dividends for the amount of labor put upon it if that labor is well directed. Even a space 50x100 feet will, if properly planned and worked, give a supply of practically all vegetables, except potatoes and a few other coarse vegetables, for a family of four the whole year. It must be rich soil, well cultivated, and a plan followed that will use the space all the growing season. With the probable high prices of vegetables this year it will pay every city and town to encourage the planting and care of vacant lots and small plots of ground.

FIVE ESSENTIALS IN POULTRY PRODUCTION

There are five major factors in profitable poultry production: breeding, feeding, housing, management and care. These are the essentials; combined they will put the poultry business on a practical business basis. A start can be made with hatching eggs, day-old chicks, or a few head of breeding stock of high production. The surest way to success is to grow into the poultry business.

Are we using an abundance of fresh fruits and vegetables and the green leaves of plants in our diet? Are we being careful that we are not having too much meat and sweets?

HOME ECONOMICS CLUBS FINISH SOON

Final Exhibit Marks End of the Bread and Sewing Projects

All the sewing and bread club members are doing their best to bring the 1921-22 contest to a successful finish. A great deal of rivalry exists between the clubs to see which one will make the highest score. The exhibit is a most interesting event. The sewing club members show their needlework while those in the food club will display samples of their skill in cooking.

The work is to be judged for the most part by Miss Dorothy Murdock, Assistant State Club Leader. Careful planning has made it possible to cover a maximum amount of territory in the limited time she can allow Essex County for exhibit judging. The various club leaders have been very helpful by conforming their schedule to the dates suggested by the County Club Agent.

One of the most important results of the exhibit judging is the choosing of the County Champion in each project.

To be chosen County Champion is the highest honor in Club Work and very often the reward is a trip during the summer to the Boys' and Girls' Club Camp at Amherst, Mass.

STATE LEADER VISITS ESSEX COUNTY

George L. Farley Makes Personal Tour to Stimulate Interest

April is the month when the boys and girls of the County enroll in the summer clubs. At this time the County Club Agent visits the grammar and junior high schools seeking out the boys and girls who wish to do profitable work this summer.

For the benefit of some of the more strategic points in the county and for some towns where club work is new, State Club Leader Farley was called in. He spent three days with us visiting Haverhill, Amesbury, Salisbury, Newbury, Manchester and Hamilton. His address to the pupils was filled with good sound advice given out in story form and beside this, he has a remarkable way of mixing in enough humor to hold the interest in his subject. The results of his work were manifest by the showing of hands in response to his question as to the number interested in joining the clubs, after his talk.

There is every indication of a better enrollment in all clubs over last year. The pig club, especially, is on the increase. Several young ladies throughout the county have volunteered to serve as canning club leaders and a few leaders will have charge of garden clubs.

ALUMNI DIRECTORY

Class of 1919

Begin, Jacob J., Poultryman,
Borderline Farm, Topsfield, Mass.
Bergstrom, Edwin E., Club Leader,
County of Rutland, Rutland, Ver-
mont (44 Elm St.)
Bloom, Ernest, Gardener,
13 Carleton St., Lynn, Mass.
Cushing, Roy D., Sales Director,
Maine Industries Corporation, 1505
Morse Ave., Chicago, Ill.
Frisbee, Ralph T.,
31 Prospect St., Amesbury, Mass.
Holmstrom, John A.,
Hillbrook Farm, Groton, Mass.
Care Donald L. Preist.
Johanson, Roy T., Shoe Manufacturer,
(Eagle Shoe Co., Everett),
Home Address, 64 Hawthorne St.,
Lynn, Mass.
Nelson, Robert E., Gardener,
Notman Estate, Eastern Point,
Gloucester, Mass.
Raymond, Byron D., Fruit Grower,
R. F. D. No. 67, Franklin, Mass.
Richard, Irene T., Student,
Northeastern College, 150 Bridge
St., Salem, Mass.

Witham, Raymond, Auto Truck As-
sembler,
285 Lynnfield St., Peabody, Mass.
Woodworth, Ralph, Student,
Mass. Agricultural College, 17 Kel-
logg Ave., Amherst, Mass.
Tucker, Gilbert E., Student,
Conn. Agricultural College, Storrs,
Conn.
Homemaking Department
Burnham, Blanche S., Milliner,
Belcher St., Essex, Mass.
Estes, Ruth E., Domestic Science
Teacher,
177 Webster St., East Boston.
(Home Address, 257 Main St.,
Groveland.)
Hodge, Dorothy H., Shoe Cutter,
Ideal B. by Shoe Co., Danvers, Mass.
(Home Address, 34 Liberty St.)
Riggs, Edith, Milliner,
Forest Ave., Essex, Mass.
Stephenson, Mary E., Nurse,
Home Address 19 Mansfield St.,
Gloucester, Mass.
Ward, Elinor H. (Mrs. G. Stewart
Barnaby),
High St., Ipswich, Mass.

CORN AND VEGETABLE SEED SHOW

(Continued from page 1)

In the corn show A. S. Longfellow captured first place in the 30-ear class three years ago, and has held it each year since, showing the results of careful rigid selection according to an ideal year after year.

Elbridge Noyes of Newbury won the greatest number of corn prizes.

L. G. Dodge of West Newbury grows and exhibits successfully a fine yellow dent corn. Most of the corn grown in Essex County from earliest times has been the smooth kernel yellow flint corn.

Andover was represented by several fine exhibits of flint corn as well as the numerous entries of high quality that come each year from the Newburys, Amesbury, Groveland, Boxford, Hamilton, Ipswich and other places.

The School planned and staged the show, the College furnished the judges and the Mass. Dept. of Agriculture gave the prize money.

Following is a list of the prize winners:

Corn Exhibit Prize Winners

Class I.

Best 30-ear exhibit, any variety, to be judged as follows: Germination 75%; General Appearance 25%—Prizes: 1st, \$5.00, A. S. Longfellow, Groveland; 2nd, \$4.00, Maudesleigh Estate, Newburyport; 3rd, \$3.00, L. G. Dodge, West Newbury; 4th, \$2.00, Ha-

zel Albertson, West Newbury; 5th, \$1.00, Jere Sullivan, West Newbury.

Class II.

Best 10 ears Flint Corn, any variety—Prizes: 1st, \$3.00, A. S. Longfellow, Groveland; 2nd, \$2.00, Elbridge Noyes, Newbury; 3rd, \$1.00, Hazel Albertson, West Newbury.

Class III.

Best 10 ears Dent Corn, any variety—Prizes: 1st, \$3.00, L. G. Dodge, West Newbury; 2nd, \$2.00, Chester Killam, Boxford; 3rd, \$1.00, J. L. Stewart, Amesbury.

Class IV.

Best 10 ears Sweet Corn, any variety—Prizes: 1st, \$3.00, Elbridge Noyes, Newbury; 2nd, \$2.00, Elbridge Noyes, Newbury; 3rd, \$1.00, I. P. Goodale, Danvers.

Class V.

Best 10 ears Pop Corn, any variety—Prizes: 1st, \$3.00, Stickney Bros., Groveland; 2nd, \$2.00, Essex Co. Agri. School, Hathorne; 3rd, \$1.00, John Ross, Danvers.

Class VI.

Best single ear Flint Corn, any variety—Prizes: 1st, \$2.00, Elbridge Noyes, Newbury; 2nd, \$1.00, Hazel Albertson, West Newbury; 3rd, ribbon, C. C. Hardy, Groveland.

Class VII.

Best single ear Dent Corn, any variety—Prizes: 1st, \$2.00, Chester Killam, Boxford.

Class VIII.

Best single ear Sweet Corn, any variety—Prizes: 1st, \$2.00, Elbridge

Noyes, Newbury; 2nd, \$1.00, Elbridge Noyes, Newbury.

Class IX.

Best single ear Pop Corn, any variety—Prizes: 1st, \$2.00, Stickney Brothers, Groveland; 2nd, \$1.00, Candlewood Farm, Ipswich.

Class X.

Best combination exhibit, including 30-ear exhibit, 10-ear and single ear exhibit—Prizes: 1st, \$3.00, A. S. Longfellow, Groveland; 2nd, \$2.00, Hazel Albertson, West Newbury.

Vegetable Seed

Class I.

Best qt. Field Beans, any variety (no seed stock required)—Prizes: 1st, \$1.50, W. J. Martin, W. Peabody; 2nd, \$1.00, W. J. Martin, W. Peabody.

Class II.

Best 2 oz. Carrot Seeds, any variety—Prizes: 1st, \$1.50, W. Goodale, Danvers Highlands; 2nd, \$1.00, I. P. Goodale, Danvers Highlands.

Class III.

Best 2 oz. Cucumber Seeds, any variety (no seed stock required)—Prizes: 1st, \$1.50, Porter Bros., Danversport; 2nd, \$1.00, John Ross, Danvers Highlands.

Class IV.

Best 2 oz. Onion Seeds, any variety—Prizes: 1st, \$1.50, G. W. Clark, Danvers; 2nd, John Ross, Danvers Highlands.

Class V.

Best 2 oz. Parsnip Seeds, any variety—Prizes: 1st, \$1.50, W. Goodale, Danvers; 2nd, \$1.00, Henry Tipert, Danvers.

Class VI.

Best exhibit of any variety of seeds not listed above—Prizes: 1st, \$1.50, W. F. Hutchinson, Danvers; 2nd, \$1.00, W. J. Martin, West Peabody.

Class VII.

Best ½ lb. Squash Seeds, any variety—Prizes: 1st, \$1.50, W. Goodale, Danvers Highlands; 2nd, \$1.00, J. P. Goodale, Danvers Highlands.

PRESERVE SURPLUS EGGS NOW

First—Select a 5-gallon crock and clean it thoroughly. Scald and dry.

Second—Boil a quantity of water and allow it to cool.

Third—When cool, measure out 9 quarts of water, place it in the crock, and add 1 quart of water glass. Mix thoroughly.

Fourth—Place clean, fresh eggs in the solution. Be sure to allow at least two inches of the solution to cover the top.

Fifth—Place crock in a cool, dry place well covered to prevent evaporation.

ADULTERATION OF MATERIALS

Inexpensive materials are demanded by the people. Why? For two reasons: first, fashion recommends certain materials one season which are replaced the next by others; second, the ever changing styles require new garments so frequently that people cannot afford to pay too high prices. To supply this demand adulteration has been resorted to and is accomplished by many different methods.

Cotton, the cheapest fiber, varies in length from $\frac{1}{2}$ -inch to 3-inch. Two important methods of cheapening cotton material are in use. First, the utilizing short fibers, and second, the weaving less warp and wool threads to the square inch and filling the spaces with sizing. An inexpensive piece of cotton may feel firm and heavy, not because of good quality, but on account of the weighting of clay, glue or starch. If torn, a heavy cloud of white particles would arise, proving the presence of the filling.

Flax is a strong fiber from which all linen articles are woven. Linen is adulterated, sometimes by the addition of cotton to the flax fiber; and sometimes like cotton materials, poorer grade linen is loaded with starch, glue or wax, to give to the public a less expensive product. "Union" is material recognized as being half cotton and half linen.

The animal product, wool, the fiber used in the woolen industry, is unequalled. Being so expensive, wool material is cheapened in two ways; first, by combining cotton with it, and, second, by using a poorer grade with a better quality wool. The worsted material is made of the longest wool fibers while woollens are woven with shorter ones. From the combing process of worsteds, short fibers are left which are called "noils" which are used in blankets and dress goods. "Shoddy" and "Mungo" are the most used substitutes, which are fibers resulting from reworked wool. "Flocks" or soft, fluffy fibers are introduced into the manufacture of the cloth at the fulling process.

In silk we get a similar problem to flax. The wearing of cotton is extensive with silk fibers, and again, mineral salts are added for weighting to enable the use of fewer threads per square inch. Weighted material should be avoided because of wearing quality. Mercerized cotton is commonly substituted for silks, but is not an adulteration of silk.

When selecting materials look for a firm, strong, even thread, unless uneven weave is a characteristic of material, and avoid weighted goods. Remember low price may mean questionable quality.

Indoor basket ball has ended for this season, but the girls are still enjoying

the game, as baskets have been placed on the lawn beside the school building.

The tennis court is a popular place and the faculty are planning a series of games with the students during the spring term.

HOMEMAKING DEPARTMENT HONOR ROLL

Ruby Estey	95%
Florence Estey	94
Kathryn Brown	93
Gertrude Martin	93
Esma Buck	92.8
Lena Tufts	92.5
Leslie Wagland	91.1
Hazel Eastman	89.8
Gertrude Wilkins	89.2
Ruth Brown	88.9
Doris Goodwin	88.3
Marjorie Harrigan	88.2
Marion Hansen	88
Esther Bryer	87.5
Eleanor Oulton	87.1
Bernice Whittier	87

HOUSE CLEANING

The beautiful spring days are here. There is no more wonderful time of year than spring, when everything is fresh, grass growing green, new buds on the trees, birds everywhere. What a time to be out of doors! But what does the word spring mean to the average New England house keeper? Spring—house cleaning—almost synonymous terms; the glory of the re-birth of nature lost in the grind of house work intensified.

House cleaning is an institution inherited from our ancestors just as town meetings or public schools, only these latter have changed and developed in the last 150 years, but with many New England house wives, spring cleaning hasn't changed since great grandmother's time. In her day the house was heated by one or two fire places and the family lived all winter in two or three rooms. The parlor and bed rooms were rarely or perhaps never heated, and in all well regulated farm houses these rooms were carpeted. Of course during the winter months the cold rooms were neglected, no thorough cleaning being possible, so that when the warm days came it was absolutely necessary to take up the carpets and remove the winter's accumulation of dust.

In these days of heated houses, hard wood floors and bath rooms, there is no excuse for waiting until spring to clean house. If one room is cleaned thoroughly weekly or fortnightly in constant rotation, there would be no need of a general upheaval, the house keeper would not be weary and nervous, nor the family disturbed. Then again there is no real need to wait until spring for inside repairs. The painters and paperers would welcome

AGRICULTURAL DEPARTMENT SCHOOL NOTES

The classroom work of the School will end on April 28th, at which time the boys will begin their agricultural project. To most of the students the summer term is the most enjoyable, as it offers exceptional opportunity to study by coming into actual contact with the real problems of agriculture.

During the past week the faculty student baseball games have been the subject of much interest and speculation. Great enthusiasm was aroused for the contests and the results indicated that the students could do at least one thing better than their teacher, i.e., play ball.

Several students are already taking up their project duties at the School. In the Poultry Division: Robert Ewing and Harold Wolfgram have found employment. Thomas Welch and Dwight Lord are working for the dairy division, while Michael O'Keefe is employed as caretaker of the School grounds. Parker Ryan, Richard R. Welch, Evan E. Roberts, Lindreth L. Roberts, Kenneth Harnden, John Sullivan and Richard Ashton are working on the market garden.

Mr. A. W. Doolittle of Acton has been appointed district club leader for the northwest section of Middlesex Co. Mr. Doolittle is not new to club work, as he covered the same district last summer with marked success. His work as a teacher in charge of Veteran Bureau Students during the winter was successful and much appreciated.

The ornamental gardening class under the direction of Instructor Wilson has been engaged in improving the shrubbery and trees on the School grounds. Several small Norway spruce have been set out near the Memorial Boulders.

Constant Dreano (1924) has secured a position on the Coonamessett Ranch at Hatchville, Mass. He is taking care of about 2,000 chicks now and later this number will be doubled. The boy reports that he is busy but enjoys the work and is getting some good experience.

Miss Ethel Browne, head of the sewing department, gave a very interesting talk at Lynnfield Center on Tuesday evening, April 11th. Once a year the Civic League invites representatives of the School to visit them and tell them of the School's activities. Miss Brown's special topic was millinery, which she treated in a most instructive manner.

the idea of spreading their work throughout the season instead of the rush which now comes in the spring. Think it over and see if house cleaning cannot be made a pleasure instead of a burden.

ESSEX FARMER AND HOME MAKER

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No. 1



Ex-Service Men Building Poultry House

EX-SERVICE MEN DOING EXCELLENT WORK ON PROJECTS

Federal Student Currier Wins Bauer Prize

The United States Government has placed forty ex-service men at the Essex Agricultural School for training. All these men have some disability which prevents them from following their previous occupations. They come from all walks of life and are of all ages up to fifty years.

Essex Aggie is giving these men a training in Agriculture so they will be able to have farms of their own and earn their own living. The course given is made as practical as possible.

The picture above shows one class constructing a poultry house at the farm of Oscar G. Poor at Lynnfield. This house was 20x60 feet and will accommodate 250 birds. This house was built from plans furnished by the Extension Department and is up-to-date in every way, including nests and dry wash hoppers, and the federal men performed all the work under the direction of their instructor and one carpenter.

The accomplishments of these men are truly wonderful. One of the most notable achievements to be accomplished was by Mr. Otto S. Currier, who recently won a Bauer Prize for his summer's work. With only one year's training at the Essex Aggie, he built up a poultry plant on his father's farm in Middleton, and in one year had sufficient pullets to support himself and family. He had nothing to start with except some old sheds and barns which he remodeled.

SEASONABLE NOTES

Happy New Year: Everybody.

Did I hear you say something about an old fashioned winter?

What about a little agricultural reading these long winter evenings? Write to the Extension Service for bulletins on what you want to find out.

One of the most valuable crops for the northern farmer during the next sixty days will be the ice crop.

On the School farm, we pack our ice in sawdust with liberal quantities of meadow hay over the top.

Snow makes a clean packing and filling material, but is undependable.

In the fruit orchard pruning is now in order.

When only a few trees and bushes are concerned probably March pruning would be slightly better.

One of the best insurances against decay and breakage in an old tree is painting of wounds carefully.

For this purpose we prefer good lead and linseed oil, coloring the same as desired.

Are your incubators all cleaned, disinfected and in running order?

By the way, have you ordered your day old chicks or hatching eggs for this coming season?

Live poultrymen visit poultry shows.

Look over your brooder stoves and see if they are all in readiness for their big job.

Are your breeders selected for 1923?

SELECTING BIRDS FOR THE BREEDING PENS

Now Is the Time to Mate Your Birds

At this time of the year the average poultryman should consider his breeding stock carefully and plan his matings so that he can build up his egg production and also maintain the health and vigor of his flock.

From year to year a careful selection of stock is necessary in order to hold and increase egg production. Mass breeding, or use of birds from the entire flock will not help the poultryman to forge ahead on egg records, but it is the attention that is paid to the certain tested individuals that will assure continuous improvement.

If the best females from the entire flock are selected and mated to vigorous males which comes from high producing mothers, an improvement in the progeny, according to the certain workings of the laws of breeding, is sure to follow.

From a month to six weeks ahead of the breeding season, generally in January and February, the poultryman should select his birds and mate them in small pens of not over 10 or 15 birds, to insure good fertility. If selected thus early the birds can be studied and the effects of previous matings will be gone. The males will get along better if the small pen plan is used.

The poultryman will be careful to avoid the use of birds having any disease, such as white diarrhea, which can be passed on to the progeny. Birds that have had the roup or other troubles will be rejected.

Poultry investigators have found that the following factors will help the poultryman to secure heavy egg production:

1. Breeding from heavy producers and persistent layers.

2. The use of mature birds, preferably hens. (If pullets are used select those that have been laying three months.)

3. The use of birds which were early layers when pullets.

4. Breeding from healthy birds with strong constitutions.

5. Selecting birds with long deep bodies, showing plenty of room for the various organs.

6. Selecting birds that are large specimens of the breed.

7. Using birds that have had a minimum of broodiness.

8. Selecting birds that have gone thru the moult well.

(Continued on page 7)

ESSEX FARMER AND HOME MAKER

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

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Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

- Jan. 1-5—Boston Poultry Show.
- Jan. 2 —School reopens—all department.
- Jan. 5 —Adjourned meeting. Essex County Farm Bureau at School.
- Jan. 6 —Make up examinations.
- Jan. 11—Market Gardeners' Extension School—All day meetings at Hathorne, 10 A. M.-4 P. M.
- Jan. 16-17-18-19—Union Agricultural Meeting at Horticultural Hall, Boston.
- Feb. 3—Boston Market Gardeners' Association at School, 12.30.
- Feb. 21—Chebacco Pomona Winter Field Meeting at School.
- Mch. 15—Annual Essex County Farmers' Day and Corn Show at School.

EDITORIALS

November 28 should be recorded as a red-letter day for the School. On this date a class of 43 was graduated, each member of which received a fitting recognition of his or her work in the form of diploma and certificate. The rapid increase in the size of the School this year over last year necessitated the use of Peabody Institute Hall in Danvers, which was well suited for this purpose. It is certainly an inspiring time when such a splendid class of young men and women leave school work to engage in their permanent life work.

The awarding of the Bauer Gold Prizes was an event of particular significance this year at graduation time. For the 9th time, these prizes have been available for competition. A committee of farmers from the Advisory Council and of homemakers from the Woman's Advisory Council examined the work and made the awards. They are very outspoken in regard to the extra quality of the projects this year and state that the

competition was keener and closer than they have ever experienced in previous years. The fine work, which is stimulated by these prizes, is far-reaching, and the honor of being adjudged a winner in this class against the entire school is no mean accomplishment.

The teaching staff of the School has been finally built up to full strength to meet the increased enrollment. The Trustees naturally feel great satisfaction in the apparent fitness of the men and women who are now conducting the instruction work. This School probably as much or more than any similar school in the country has aimed to secure on its teaching staff men and women of experience who have made a mark for themselves in the field from which they were selected.

Amongst the many needs of this rapidly growing School, the want of proper greenhouse and glass facilities stands paramount. During the fall, a committee from the Essex County Associated Boards of Trade have been looking into the operations of the School and making a study of its needs, and have decided to support the Trustees in their request for an appropriation for the above purpose. Essex County is one of the most important counties in the broad field of horticulture, which includes market gardening, commercial floriculture, landscape gardening, nursery practice and private estate management. There has never been a time in the history of the country when there has been such a great dearth of men capable of filling these responsible positions. Certainly your County Agricultural School with its staff of well-trained men should have an opportunity afforded them through suitable greenhouse facilities of giving this instruction. The addition of suitable glass would lengthen and extend the practical instruction period. It is also proposed to provide for two class rooms in the head house of the greenhouse plant, thus relieving the already over-crowded condition of the brick building.

Use the Extension Service?

One of the first farm jobs for 1923 will be to properly prune the orchard. This may be done any time up until growth starts in the spring. Send for circular on "Pruning the Bearing Orchard," or better, arrange to have the county agent give a pruning demonstration.

How about the spraying outfit? It's a good time to overhaul it now, and get new parts where needed, rather than wait until you are ready to use it in the spring.

Protect your trees from mice by tramping snow around the tree. This ought to be done after each storm.

ATHLETICS AT ESSEX

OUTLOOK BRIGHT FOR BASKETBALL AND HOCKEY

The prospects for both major sports the coming season are very promising. In addition to basketball and hockey, track will be an added branch of athletics the coming season and one Indoor Meet has already been scheduled with Gloucester High for January 26.

Coach Page will have charge of Basketball and has six letter men as a nucleus to work with. The old men are Capt. Ewing, Lombard and Dreano, backs; Coukos, center; Moore and Hansen, forwards. An inter-class schedule has been organized and several games have been played revealing a large number of basket shooters.

Basketball Schedule

Friday, Jan. 12, at 3.30, Salem Normal at Hathorne.

Tuesday, Jan. 16, at 3.30, Methuen High at Hathorne.

Saturday, Jan. 20, Gloucester High at Gloucester.

Wednesday, Jan. 24, at 3.30, Marblehead High at Hathorne.

Friday, Jan. 26, Haverhill High at Haverhill.

Wednesday, Jan. 31, Salem Normal at Salem.

Friday, Feb. 2, at 7.30, Bristol Aggies at Hathorne.

Thursday, Feb. 8, Methuen High at Lawrence Y. M. C. A.

Saturday, Feb. 10, Lynn Classical at Lynn.

Wednesday, Feb. 14, at 3.30, Gloucester High at Hathorne.

Friday, Feb. 16, Dummer Academy at Dummer.

Saturday, Feb. 17, Marblehead High at Marblehead.

Friday, Feb. 23, at 7.30, Norfolk Aggies at Hathorne.

Wednesday, Feb. 28, at 3.30, Dummer Academy at Hathorne.

Friday, March 2, Bristol Aggies at Segreganset.

Friday, March 9, Norfolk Aggies at Walpole.

Mr. Stowell will coach Hockey again this season and both he and Capt. Jordan are very optimistic about the team. An unusually large number of promising candidates are practicing regularly in the new rink. They expect one of the best hockey seasons for several years.

The schedule is nearly completed and includes games with our old rivals,—St. John's Prep, Punched, Ipswich and several new teams, including Manchester High and Dummer Academy.

The Girls' Basketball team has a number of experienced players and also expects a successful season. Altogether this should mean athletics for every Aggie Student.

ANNUAL REPORTS OF EXTENSION SERVICE

REPORT OF COUNTY AGRICULTURAL AGENT

Space will not permit the printing of the detailed annual reports which have already been submitted to the county, state and federal officials having charge of Extension work, but, in order to keep all interested in agriculture and home economics well informed of the progress made, a brief summary is presented of the more important activities.

County Agent's Report

This report covers the period from May 1st, when I assumed my duties as County Agent, to November 30th.

Due to the fact that the county was without a County Agent from March 15th to May 1st, a time when crop demonstrations are started, very little was accomplished along this line. In fact this break in the service interfered quite seriously with the carrying on of organized work in many of the projects.

Poultry

The poultry project from the very first demanded and received the major part of the County Agent's time. Culling demonstrations were held in Haverhill, Gloucester, Ipswich, Saugus, West Peabody (2) and Topsfield with a total attendance of 269 people. Five of these demonstrations took place on the farm and the explanation was so taken up as to give each one a chance to learn all details.

By request, five demonstrations in canapizing were given. About 100 birds were treated with no fatalities. Of the 42 people who attended, about 10 performed the operation under the supervision of the County Agent.

Three demonstrations in killing and picking were given by the Extension Specialist Wm. C. Monahan.

In response to the many requests that came in for assistance in re-modelling and building poultry houses that were adapted to this climate, the County Extension Service had blue prints made of a colony house measuring 12 feet long and 16 feet deep capable of caring for 300 chicks in the spring. Another set of plans was made for a house measuring 50 feet long and 20 feet deep capable of caring for 200 hens with provision for a grain room at one end. These plans have proven helpful and over 30 have been sent out to applicants. As a result of this assistance, 8 houses have been put up this year and all are giving good satisfaction.

A great deal of time has been spent giving assistance to both amateur and commercial poultrymen in disease control. To this end, the County Agent performed 30 autopsies and gave detailed recommendations for

treatment which in a majority of cases was for intestinal worms. From September 1st, chicken pox, roup and canker were the common ailments that received attention.

Cabbage Maggot Control

The demonstration carried on by Mr. Aubrey Gates of Danvers will be of special interest to market gardeners because the maggots were controlled by a comparatively new treatment, viz. treating the seedlings with a solution of corrosive sublimate at the rate of 1 oz. to 10 gal. of water. One-third of an acre of plants were treated in the middle of a two-acre plot so we had a check plot on either side. Two applications were made, which cost at the rate of \$12.60 per acre. The treated plots showed as high as 99% control, while the loss on the check plots varied from 15 to 20%.

Silo Building

A home-made silo was erected on the farm of L. H. Kimball, Haverhill, at a cost of \$93.40, not including labor. No staging was used in the construction. This silo differed from other homemade silos in the county in that the staves had to be spliced as they were sawed in nine and eleven foot lengths. The splicing was economically done by using sections of an old mowing machine cutter bar. Twelve people attended the "building bee".

How the County Agent Spends His Time

The various activities of the County Agent for the period May 1st to November 30th are briefly summarized below. A study of this summary will answer the question raised by the heading of this article. Days in field, 106; days in office, 64; number farmers visited on farms, 246; calls on demonstrators, 87; total farm calls, 333; phone calls, 94; automobile tours, 2; attendance 115; demonstration meetings held, 19; attendance, 337; miscellaneous meetings, 14; attendance, 130; community meetings, 6; attendance, 43; total meetings, 41; attendance, 625; individual letters written, 412; circular letters prepared, 23; circular letters mailed, 4,107; news articles prepared, 7.

Outlook for 1923

While the detailed program for 1923 has not been definitely decided upon as yet, indications point to the program carrying the same general projects as were carried this year. Based upon the response received during the past year, the major projects will rank in the following order: poultry, fruit, vegetable growing, farm management, dairy and service work.

(Continued on page 4)

REPORT OF HOME DEMONSTRATION AGENT FOR THE HOME

In Extension work for the home, communities are reached in two ways: First, and most important, is the definite project in Nutrition, Home Management, or Clothing that extends over a period of several weeks or months. Thirty-two (32) communities in Essex County have carried on this type of work during the past year. The second, is by the single meeting, demonstration, exhibit or co-operative assistance. Twelve (12) communities have had this kind of work. Six (6) communities have had the use of the traveling libraries of Home Economic books.

Forty (40) different communities have been reached by one or more of these methods.

With the constantly increasing demand for Extension Service for the Home, it has become necessary to ask the local women to take more responsibility for the meetings and for records of the results. At first the Home Demonstration Agent felt that this might be difficult, as the women already are very busy, but it has been found that the women of Essex County are willing to assist in every way possible.

Following is part of the data on results reported:

From the project of a Nutrition Study Group for School Children:

- 21 increased use of milk.
- 17 use of less tea and coffee.
- 13 use of more vegetables.
- 3 less sugar and candy.
- 2 use of more fruit.
- 2 better attendance.
- 1 each—more water, better breakfasts and more interest.

From Adult Nutrition Projects, help on the following:

- 3 planning meals.
- 3 variety of vegetables.
- 2 greater use of fruit.
- 4 salads.
- 1 using more milk.
- 7 food for constipation.
- 2 coarse breads.
- 9 adequate diet.
- 9 variety of meals.
- 2 reducing meat bill.
- 5 underweight children.
- 1 overcoming dislike for milk.
- 1 overweight.
- 1 special diet for child.
- 3 headache.
- 1 indigestion.
- 2 packed luncheons.

(Continued on page 5)

WITH THE COUNTY AGRICULTURAL AGENT

ANNUAL REPORT

(Continued from page 3)

Because of the difficulty experienced in getting a good attendance at a community planning meeting, it has been decided to hold one or two-day Extension Schools in the leading agricultural communities. The programs at these schools will be arranged to give the latest approved subject matter instruction, followed by a discussion of local problems. It is hoped that by using this method only those demonstrations will be arranged as will have a definite purpose in the community. In other words, instead of booking a large number of demonstrations, as has been the custom all over the state in the past, attention will be given to real problems and concentrating all efforts to the solving of these problems.

The proposed Extension Schools are now in process of organization and as they are to be held in cooperation with your local Farm Bureau Committee, it would be well to get in touch with the members of the committee or the County Agent to make known your wants.

New Farm Account Books Ready for Distribution

The writer was once asked by a farmer the following question: "If I kept a farm account book and my book disclosed the fact that I could not show a profit, would I still stay on the farm?" This question was presented at a farmers' meeting in Maine and my reply was somewhat as follows: "I certainly would not care to sell out just because one year's business was unprofitable. I would summarize my work, determine the 'leaks' and try it again. If I could not show a profit, in a reasonable length of time, of course I would sell out, and anyone else would do the same if he was not making the farm pay and knew it."

One of the greatest drawbacks to the progress of many farmers is that they do not know where they stand from a business standpoint. Some would be better off to sell out and go into some other occupation but most farmers would profit by a proper analysis of their work. Which class are you in?

The new farm account books are of the column distribution type, rather than the page distribution, so it is not necessary to thumb over a number of pages every time an entry is made. It is simple and efficient. These books will be furnished this year free of charge to all farmers who wish to be listed as co-operators, who will turn in their books at the close of the year for summarizing. No publicity of

any kind will be given to individual figures, and each co-operator will be furnished with a summarized sheet of his year's work. Now is the time to find out if you are farming profitably or not or whether you could farm more profitably in the future.

Extension Program for 1923

The following plan of work was worked out in co-operation with a committee representing the Farm Bureau and the County Agent, representing the Extension Service. This plan was presented to the Farm Bureau at their annual meeting held at the Agricultural School, January 5th, and was unanimously adopted.

Agronomy

- Top dressing pastures and hay land.
- Economic potato demonstrations.
- Dusting demonstrations.
- Acid phosphate to supplement manure on corn land vs. complete fertilizers.

Dairy

- Extension Schools.

Farm Management

- Account Books.
- Auto Tour.

Fruit

- Extension Schools.
- Economic Demonstrations.
- Spraying demonstrations to control scab.
- Thinning, pruning and grafting demonstrations.

Poultry

- Extension Schools.
- Cost Accounting.
- Disease Control.
- Poultry Management Auto Tours.
- Culling and other demonstrations by request.

Vegetable Growing

- Extension Schools in Winter.
- Demonstrations.
- Auto Tour.

Market Gardeners' Extension School

Arrangements have been completed for a one-day market gardeners' Extension School to be held Thursday, January 11th, at the Essex County Agricultural School, Hathorne. The leading subjects to be discussed will be (1) Seed Quality. (2) Marketing (3) Plant Food Problems. (4) Extension Program for Vegetable Growers in Essex County. Professor H. F. Tompson, Head of the Market Garden Field Station, Arlington, Mass., and Mr. W. A. Munson, of the State Board of Agriculture will be present to take part in the program. Each one of the subjects above named are of vital importance to the vegetable growers in Essex County, who are cordially invited to attend. Plan to bring your basket lunch and spend the day at School.

EXTENSION SCHOOLS

Is Your Community in Line for One?

During January and February, one and two-day Extension Schools will be held in those communities where an active demand for this type of meeting exists. Already, requests have come in from Andover, Merrimac, Haverhill, Amesbury and Salisbury. The two towns last named will join in holding a meeting.

Detailed plans are now being made to hold these Schools and when final arrangements are made, sufficient publicity will be given through local newspapers and through circular letters so that you can plan to attend. The chief object of these schools is to give instruction in the latest approved farm practices in Agriculture and Home Economics, and to formulate a program of work that will help in solving local problems.

Watch out for future announcements and plan to support these schools with your attendance and co-operation. Any suggestion regarding Extension Schools will be welcome, and should be handed on to your local Farm Bureau Committee, which is co-operating in this work, or to the County Agent.

Poultry Cost Accounting Records Kept On Over 12,000 Birds in Essex County

Essex County has the distinction of having more poultry cost account co-operators than any other county in the state. At the present time there are sixty-five (65) poultrymen keeping cost accounts. These men send their reports in to the County Agent each month on report forms provided, and, in return, are furnished statistics giving county and state averages. Most of these men started their records November 1st, but some began December 1st and others plan to begin January 1st. Over 12,000 birds are involved in the data for November and when all the reports are in for December and January, it is expected this number will be increased to 15,000.

A study of the final summaries will show (1) Average investment used in poultry farming in Essex County. (2) Egg production per bird per year. (3) Average net profit per bird. (4) Average cost to feed a bird per year. In addition to this, each co-operator is being shown how to keep a simple set of accounts, and will be instructed on summarizing his year's work. By studying the summary it will be possible to look over the plant with a view to increasing efficiency, which in turn will increase the labor income.

WITH THE HOME DEMONSTRATION AGENT

EXTENSION SERVICE FOR THE HOMES Project Leaders

Our project leaders are taking more responsibility for publicity, records and reports. We are offering them the opportunity of district conferences with a state specialist where they will be given the subject matter and trained to give it in their own communities. The first five communities to organize for this plan are Lynnfield Center; Glenmere, Lynn; East Saugus; Saugus Center and Cliftondale. Each community has a group of twelve women who wish to have the clothing work. Two women from each group have been chosen to act as project leader and assistant. These ten women will go to Cliftondale once a month for an all-day meeting with Miss Marion Tucker, the state specialist in clothing. Then, they will give this same instruction to the women in their own community.

The leaders elected are: Mrs. Charles E. Joli, Leader; Mrs. C. E. Baker, Assistant Leader in Lynnfield Center; Mrs. Lillian Clark, Leader; Mrs. Addie Wing, Assistant Leader in Glenmere (Lynn); Mrs. Marr, Leader, Mrs. Archer, Assistant Leader in Lynnhurst, (East Saugus); Miss Annie M. McCullogh, Leader; Mrs. Goss, Assistant Leader in Saugus Center; and Mrs. U. B. Jenkins, Leader; Mrs. May MacKenzie, Assistant Leader in Cliftondale.

Hamilton is organizing five communities in Hamilton and Wenham, for the same type of work in Nutrition.

ANNUAL REPORT

(Continued from page 3)

From Home Management Projects:
4 that the account book has helped them to know "where their money goes."

2 that it is a help as a "basis for budget."

1 that it helps with a better division of expenditures.

2 that it helps in "a larger savings."

2 that they now make a budget.

5 improved practices in silver cleaning.

In Clothing we have the following reports from women as to the points found especially valuable:

1. Choosing patterns.

2. Changing commercial patterns.

3. How to cut the back of a dress larger without enlarging the neck.

4. How to use two patterns for one garment.

5. How to cut a good skirt without a pattern.

6. Laying patterns on so as to prevent waste.

7. Good shoulder lines.
8. Putting in sleeves.
9. Pockets.
10. Plaques.
11. Finishing.
12. Fitting.
13. To cut and fit collars.
14. Bound buttonhole.
15. Facing neck and sleeves.
16. How to measure a person.
17. When to and when not to use French seams.
18. How to get an even length for a dress or skirt.
19. Linings.
20. Putting on belt.
21. Facing around arm's eye of lining.
22. How to keep a curved edge from stretching by running a thread around edge.

Individual Assistance.

One roadside market was carried on with jellies and jams as the main product. These were made according to directions given in personal conference with the Home Demonstration Agent.

Another roadside market sold canned chicken preserved according to directions at neighborhood demonstration of canning chicken with pressure cooker.

One home was visited by request to help the mother plan more ways of using milk.

Two homes were visited and the women advised as to household accounts and budgets.

One woman was given suggestions for special menus to use for a prescribed diet.

Individual advice was given as to choice of color and design for clothing.

The economic basis is the one that interests the public most, but how estimate the value of better food habits, better arranged kitchens and improved home practices? There is a saving on drug store bills and doctors' bills, an increased efficiency in the home, and a saving of time and strength. All will admit that these have a real money value, but as yet we have no way of making a definite estimate.

We do not have the same difficulty in regard to the clothing. Figuring on a minimum basis for the garments, hats and dress forms made during the past year, we can give the following figures:

New garments made	180
Saving	\$900
No. of hats made	322
Saving	\$1127
No. Dress Forms made	165
Saving	\$2285.25

ALICE J. BUNCE.

RECIPES FOR COLD WEATHER Old Fashioned Bean Porridge

Proceed the same as for beef stew, using a smaller amount of meat cut in small pieces and no vegetables. Prepare beans, any kind preferred. Soak over night. Rinse and parboil at least 10 minutes. Rinse again and add to beef broth. Cook until beans are tender. Serve with crisp crackers.

Meat Pie

Cut up cold roast or pot roast of beef in small pieces. Place in dish with enough gravy or hot water to moisten. Cut one Spanish onion or several small onions in small pieces. Fry in a small quantity of fat. Add this to the meat. Cover all with mashed potato. Place in a medium hot oven until potato is brown.

Spaghetti and Peanuts

1 pt. boiled spaghetti. ½ c. uncooked.

1 c. medium white sauce

½ c. peanuts (chopped)

1 c. buttered crumbs (1 tb. butter, ½ c. crumbs).

Cook spaghetti in large quantity of salted water, drain and rinse quickly with cold water. Add white sauce to which nuts have been added. Cover with buttered crumbs and bake until crumbs are browned.

Liver and Bacon

Cover the liver with boiling water. Let stand eight to ten minutes depending on thickness. Drain. Wipe and remove the thin outside skin and all membrane. Sprinkle with salt and pepper, dredge with flour and pan broil in bacon fat. Serve with bacon.

Eat Weeds to Keep From Starving

It was Nebuchadnezzar who "did eat grass as oxen" when he went crazy, and the world has always wondered about him. Next winter, in Russia, there will be thousands, perhaps even millions, of Nebuchadnezzars. They will not be mad men, however. They will be starving folk.

The Quaker relief workers in the famine zone report that a regulation has been passed requiring every resident to gather from 3,600 to 7,500 pounds of grass and weeds for their winter's food supply. In the drought-stricken regions the crops may fail, but the weeds grow.

The Quaker workers write that in the districts in which they are engaged in administering relief, "there are approximately sixty varieties of grasses and weeds which are being gathered for use as food. They are ground into flour which is used to make a coarse bread, or which is mixed with grain flour by those peasants who are fortunate enough to possess any, or to receive any from their relief workers."

WITH THE COUNTY CLUB AGENT

COUNTY CLUB AGENT 4-H CLUB WORK ANNUAL REPORT SUMMARY

The year just passed was a profitable one so far as 4-H club work for boys and girls was concerned. Especial effort was made to hold the club members of the previous season over and keep up their interest in advanced work. A great many practical demonstrations were pushed. Boys' and Girls' Club Work is not simply a movement to get our Essex County youngsters to do manual labor, but to interest them in practical things and above all teach them to demonstrate the newer, better methods of doing the work. At the recent Extension Workers' Conference at Amherst, a speaker, explaining the purpose of a demonstration, said "A person learns 3-8 by reading, 5-8 by seeing, and 7-8 by doing a piece of work." Hence, the requirement that each club member carry on a good-sized practice at home of the nature of the club in which he or she has an interest.

The actual enrollment of all clubs starting and finishing between December 1, 1921, and December 1, 1922, in Essex County was 1448. This represents the number of boys and girls actually commencing the work. The completion was 941, or about 65%. By completion it meant the number of members actually doing all the project requirements and making the reports on the work as are requested. Certain records are required showing the extensiveness of the project, the costs and the income. The latter many times is not actual as most products of club work are turned back into family use, thereby disappearing so far as cash returns are concerned. The basis of cost and credit in club work is the value of the materials used and the value of the finished product. For instance, a girl in the clothing club chooses to make a dress. Careful accounts show the price paid for the materials (usually by the mother) and when the garment is finished it is given such value as a dress of like material would cost in a store. The difference represents the profit. Although the girl handled no real cash, she is credited with that profit. In the poultry club, the number of eggs laid by the member's flock each month is valued at a fair market price and the month's incomes are totalled, showing the income for the contest. This offsets price fluctuations. The costs of feed and incidental expenses are deducted, the balance representing profit. Many of the eggs are used at home and so no cash is realized on them, however with the value idea as practiced in club work, the flock gets

credit for all the eggs laid. More advanced members are required to charge up their labor as expense. The value system as practiced in club work does not inflate values of the youngster's work but is fair and practical. The total value of club work products last year was \$18,336.23 in Essex County. Costs amounted to \$7,151.34. The profit to club members was \$11,184.99. Quite a respectable sum of money. Did you say "What did it cost us as tax payers, all this fine work?" "Is the game worth the candle?" The cost of club work to the county from December 1, 1921, to December 1, 1922, was \$2488.72. This figure covers the Agent's salary and travel expenses, office expenses, material, etc. In other words, the value of the products made or grown by club members last year was worth \$8696.17 over and above the costs of production.

So much for the financial side of the work. The greatest benefit from 4-H Club Work is always the educational gain made by the members. To attempt to tabulate the extent of this gain would be impossible, as it can't be expressed in figures. It is evident, however, that a great deal of valuable information was gained by the 1500 boys and girls who enjoyed the privileges of 4-H Club Work last year.

BEVERLY AGAIN SENDS A CHAMPION TO CAMP

The best example of canning club work for 1922 was done by Bertha Greaney of Beverly. Under the leadership of Miss Parker at the Beverly Health Center, Bertha completed her fourth year of work. She canned a total of about 250 jars, including jams, jellies, meat and vegetables and fruits of all kinds. The most prominent worker in each club was visited by Miss Murdock, Assistant State Club Leader, and she saw all their work. Only such members as had done 100 or more jars were considered and then the quality was the deciding factor. Bertha's work was the nearest to perfection, although Sevilla Wardman of Haverhill was very close to the top. Of honorable mention are the names of Elmer White of Beverly, Eda Cesati, Haverhill, and Corabelle Mitchell, Haverhill.

The contest for State Champion candidates fell between Madeleine Walker of Beverly and Cora Doane of Groveland. Both names have been submitted to Amherst together with brief historicals about their work. Both have been county champion and their summer's work was of equally good quality although a little different in nature.

1922 GARDEN CHAMPION MIDDLETON BOY TAKES THE HONORS

The past summer was about the hardest season gardeners have ever experienced. Seasoned farmers stood in the barn door and watched the "water's ruse" in the potato patch. For days it rained intermittently, flooding the fields so that cultivation was impossible, until several days' sunshine had taken up the surplus moisture. In the lower sections, the crops merely gave in to the water and weeds and a few courageous farmers sallied out between the drizzles and hand-weeded and hoed their crops on higher land, bringing in a little harvest. A great many farmers, old at the game, threw up their hands and said "It can't be done" and gave up trying. If these regular farmers were dismayed, just imagine how it hit the novice who had joined the Boys' and Girls' Garden Club.

The enrollment of Garden Club members in Essex County this summer was 274. This included both boys and girls. Thirty-three regular clubs were organized in various places. The number finishing the work, that is, caring for their garden and returning reports as to costs and credits, was 148. This poor completion is due mainly to the wet season which destroyed so many gardens.

A most remarkable record was made by Benjamin Ogden of Middleton. The Club Agent paced off his lot of land and found that it contained 16,524 feet or about 1-3 of an acre. Benjamin's father works away from home all day and with a large family a garden is a necessity, so the job fell to Benjamin, the oldest boy. He is 14 and not very husky in appearance, but he had the enthusiasm and here's what it did for him.

He started right by joining the Garden Club. He kept it up by getting after his uncle to plow his land early and then he worked all his spare time, planting early stuff. The land, fortunately, was light and gravelly, and was ideal for such a wet season. For fertilizer he used hen manure and commercial fertilizer. From his account book I read that on July 3rd he sold a bushel of peas for \$4.00. From then until the first of October his book is filled with interesting items. The last few are large items, such as 20 bushels of potatoes, etc., as he put away the winter supply of vegetables for the family.

Most of the garden products were used at home and credit was given for these at market price. On the other hand, potatoes, beans and corn which

(Continued on page 7)

ESSEX AGGIE ALUMNI ASSOCIATION

The annual meeting of the Essex Aggie Alumni Association was held at the County Agricultural School November 28th. The following officers were elected for 1923:—

President—Ernest A. Howard.
Secretary—Mabel Curtis.
Vice-President—Homemaking Dept., Janet Stanley.
Vice-President—Agricultural Dept., Wallace Moreland.

A discussion regarding an additional social activity resulted in a motion, which was passed, favoring an entertainment and dance to be held at the school in the early spring. Miss Mildred Annan was appointed Chairman of this committee.

Regret was expressed by the Association in that the graduating class was misinformed about invitations to the Alumni Banquet. However, the mistake was explained satisfactorily to the class and a very cordial feeling now exists.

The Alumni Association is now beginning its sixth year and is more active today than ever before. However, we need a still larger enrollment. Every graduate of the School should be associated with this organization and should take an active part in all matters of interest to the Association. Your School needs you after you have graduated.

Join the Association and take an active part in its work. With your cooperation we can prove of real service to our School and to the County.

Some time in March, members of the Association will be notified about our Spring entertainment and dance. This event will be the beginning of our new activities. The success will depend on the cooperation of its members.

ERNEST A. HOWARD.

COUNTY CLUB AGENT

(Continued from page 6)

he had used for seed were home-grown, but he charged them up at their value. The entire work on the garden was done by the boy. He worked early and late and, needless to say, didn't have much time for fishing, baseball, etc. He did the biggest thing a boy can do. He sacrificed his fun to help out his father, mother, brothers and sisters. He is also the Essex County Garden Champion. He made more money than any other Garden Club member. His profit was \$187.40 on 1-3 of an acre.

The second best profit was made by Edwin Claridge of 70 Whittier street, Haverhill. He made \$107.32 on a garden of 2,205 square feet. This profit per square foot is greater than Ogden's, but the size of the job handled is of great importance. The boy doing the man-sized project should get preference, even though he makes a smaller proportionate profit.

FALL HONOR ROLL

Some very creditable records in scholarship were made by the students in the Agricultural Department during the fall term which closed Nov. 17, 1922.

E. Parker Ryan of Swampscott has a perfect record, receiving an "A" grade in every subject and the maximum number of credits, 21. He is closely followed by four others, all of whom received better than 19 credits.

2. Oliver Holmes.....Swampscott
3. James N. Skinner.....Marblehead
4. Andrew Coukos.....Lynn
5. Paul Brickett.....Lynn

18—19 Credits

Walter E. Moore.....	Everett
Alton G. Perkins.....	Lynn
George Constantinides.....	Lynn
James H. Curran.....	Danvers
Howard Martin.....	Danvers
Edmund Plummer.....	Newbury
Carl Roberts.....	Newbury
Evan Roberts.....	Topsfield
Irving Nichols.....	Gloucester
James F. Bradley.....	Gloucester
Robert Lewis.....	Andover
James B. Silva, Jr.....	Rockport
Laurier Rafuse.....	Lynn
John H. Snow.....	Medway
Aubrey D. Vaughan.....	Lynn
George H. Morse.....	Georgetown

In addition to the above, twenty-four other students, coming from all parts of Essex County, received from 1 to 18 credits, but for lack of space their names are omitted.

SELECTING BIRDS

(Continued from page 1)

9. Selecting birds that are early risers and late retires, good eaters and active.

The poultryman should select his birds so they will be as uniform as possible as to females and the male should be selected so to correct the faults of his mates. The proportion of females and males in special breeding pens will depend on such factors as the breed, size of the flock and the season.

Special attention should be paid to proper housing and sanitary conditions. Plenty of room for exercise and plenty of sunlight is essential.

Feeding the birds in the breeding pens should be carefully studied. They should be kept in good physical condition and fed so as to get strong, fertile eggs. Exercise is of great importance and the birds should be kept hustling to keep down fat. Deep litter will help.

AGRICULTURAL DEPARTMENT BAUER PRIZE WINNERS

One of the high lights of Graduation on Nov. 28 was the announcement by Mr. W. H. Bronson of Boston of the Winners of the Gold Prizes offered annually by Mr. and Mrs. R. S. Bauer of Lynn to those students in the Agricultural and Homemaking Departments who make the most effective use on project of the things they have learned in school the previous year. The winners of the agricultural prizes are:

1. George Sargent, North Saugus
 2. Brooks Dwyer, Bradford
 3. Roger Lewis, Andover
 4. Otto Currier, Middleton
 5. George Garland, Andover
- Hon. Men. Howard Martin
Hon. Men. Andrew Coukos

Sargent was in charge of a large general farm in Saugus, handling live stock, haying, gardening, potatoes and marketing the products. He also handled 1200 bushels of cranberries from the cranberry bog. The efficient way in which he assumed responsibility and carried thru the farm operations won high praise from his employer. He also carried home interests in live stock and cared for a successful 1-2 acre garden. His summer operations netted him a cash value of close to \$500.00.

Dwyer carried a three-acre market garden, investing his own money and clearing a cash value of several hundred dollars. He also cared for some livestock as part of his project.

Lewis, the youngest contestant, had a fine home garden project and worked several hundred hours for his father besides.

Currier is a disabled veteran of the World War who, on his father's place, raised 1300 chicks, rebuilt two houses and remodelled a section of the barn. His fall inventory showed a valuation of over \$3000.00.

Garland is a graduate, class of '22, who had a general farm management project on the home place with about 3 acres of corn, garden and small fruit.

At this time of the year look out for feather-pulling which is apt to develop when the birds are closely confined. Keep the birds busy and watch your feeding.

What about your oyster-shells? Keep your hoppers always well filled. Thin-shelled eggs often come from this cause which leads to egg eating, a serious trouble. Lack of shells also causes a drop in egg production. Keep plenty of grit and charcoal before the layers.

HOME MAKING DEPARTMENT

The Homemaking Department at Essex Aggie wishes all its friends a Happy New Year and invites them to visit the School and see the work done there, by the eighty students who are studying to become the best homemakers in Essex County.

The following students have not been absent or tardy from the beginning of School, September 5, to the Christmas vacation beginning Dec. 20: Blanche Atherton, Lynn; Alice Coleman, Peabody; Janet Dyer, Danvers; Ruth Gay, Lynn; Margaret Greenleaf, Lynn; Gertrude Janes, Beverly; Marion Keyes, Danvers; Eleanor Oulton, Swampscott; Evelyn Newhall, Lynn; Florence Mason, Marblehead; Frances Martin, Lynn; Geraldine Wilson, Ipswich.

Homemaking

In the past it was thought that homemaking, or housekeeping, as it was then called, was one of the things that didn't have to be taught, because it came natural to a woman, or, at best, that every girl could follow in the footsteps of her mother and absorb, rather than learn, the essentials of making a happy and successful home.

We have only to look about us to see how far afield that theory has led us. Taking into consideration the human element, we find that the mother and daughter are not always like-minded, and because of that, conflicts are sure to follow. Then, too, because a woman is born a woman, doesn't necessarily mean that she is a born home-maker. She may be married, have a home and family and still have no well grounded knowledge as to the business of making her home what it ought to be. In that case, how will her daughter learn? And so it has gone on for generations in some families until at last it has been recognized that homemaking is a profession and that like any other profession a training is necessary to its successful consummation.

Time was, when it was not considered good form to talk to a girl about her possible and most probable life work, as wife, mother and home-maker, but that time is rapidly passing and the girl who does not plan and study for the life nature intended for her, will soon be the exception. Educators are everywhere considering this subject and are even now passing the strictly vocational stage. Sewing and cooking are occupying there important places, but Household Management, House Planning, Home Nursing and Care of Children are taking a prominent place, as well as Literature and good English. It has been learned, that like everything else, training is necessary to make success and that it requires a trained, intelligent, broad-minded woman to make a real home.



The Winners—Inter-class Track Meet

The following list of students are on the honor roll to Dec. 1, 1922:

Hazel Eastman, Lynn	88.7
Marjorie Livingston, Andover.....	88.7
Gertrude Smith, Methuen.....	87
Gladys Hulsman, Lynn.....	86.7
Leslie Wagland, Methuen.....	86.7
Rita Foster, Danvers.....	86.6
Edith Sutter, Lynn.....	85.5
Mary Finch, Marblehead.....	85.3
Elizabeth Seale, Salem.....	85.1
Elizabeth Wagland, Methuen.....	85

AGGIE GIRLS HELP IN CLUB WORK

Several of the girls in the Home-making Department are showing their appreciation of what Essex County is doing for them and are acting as local leaders in 4-H Club work. These clubs are composed of girls of grammar school age who voluntarily agreed to do the club requirements, some in food and some in clothing work. The group of leaders is called together each month and instructed in the work of leadership by Miss Dorothy Murdock, the Assistant State Club Leader at Amherst. The individual problems of each leader is discussed also.

The girls leading clubs or about to do so are Doris Goodwin of Swampscott, Nora Fouhey of Danvers, Elizabeth Wagland of Methuen, Edith Sutter of Lynn, Marion Small of Peabody, Elizabeth Seale of Salem, Madeline Walker of Beverly and Arline Fowler of Ward Hill.

These girls will render a great service to the youngsters in their charge and this service is well appreciated by the county through the Club Agent of the Extension Service. They also will acquire valuable training in demonstrating better practices.

Bauer Prize Winner

Miss Marion Hansen of Beverly was the winner of the \$20.00 gold piece, this being the first prize, which is given annually to the students of the Homemaking Department, making the

JUNIOR CLASS CHRISTMAS PARTY—ENTERTAINMENT BY EX-SERVICE MEN Coming School Socials

The second annual Christmas Tree and Dance was held on Tuesday, December 19th. The Junior Class had charge of the party and is to be commended on the manner in which every member of the class helped to make the afternoon an enjoyable one for all who attended. The Assembly Hall was prettily decorated with green and red streamers and a huge red cedar tree was loaded with presents for all.

A short entertainment consisting of vaudeville acts by the ex-service men preceded the tree, after which dancing was enjoyed to the music of Whalen's Orchestra. A basketball game between the letter men and a picked team from the faculty resulted in a score of 15 to 14 in favor of the latter.

During February the annual Junior Prom, will be held and another school social is planned. The Homemaking Department of the School is preparing a play which will be presented some time during this month. The Senior Dance will be held January 19th, and in addition to this another school social will be given by the Agricultural Department.

best record for summer project work.

Miss Hansen organized and had full charge of the summer canning in the public schools of Haverhill. She had 19 clubs located in different parts of the city, any boy or girl in the public schools above the fourth grade being eligible.

At the close of the summer an exhibition was given to parents and friends and Miss Dorothy Murdock, Assistant State Club Leader, judged the canning and awarded the prizes. Miss Hansen graduated on November 28, 1922, from the Homemaking Department of the Essex Agricultural School.

ESSEX FARMER and HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 4

HATHORNE, MASS., MARCH, 1923

No. 2

NINTH ANNUAL FARMERS' DAY

All Day Program Including Noted
Speakers, Educational and Trade
Exhibits, Corn and Seed Show

The committee having charge of the program for the Ninth Annual Farmers' Day has long been at work shaping a program that will appeal strongly to every farmer and home-maker in the county and everything is all staged for one of the biggest Farmers' Days ever held in this section.

The morning lecture program will begin promptly at 10:30 A.M. when the entire assembly will be addressed by Dr. E. D. Ball, head of the U. S. Department on Research. Dr. Ball is a very able and convincing speaker and will discuss "The Trend of Agriculture." Very few men in the country have the ability to handle such a broad subject, and we feel that it will be a special privilege to listen to his message.

Dr. Arthur W. Gilbert, Commissioner of Agriculture in Massachusetts, will speak on "The Agricultural Outlook in Massachusetts and New England." The speaker is well known to Essex County audiences. He has a point of view which should be known and understood by everyone interested in our agricultural development.

Basket lunches should be provided by the visitors. There will be an opportunity to buy coffee and ice cream at the School.

The afternoon program will begin at 1.00 P.M., when a fitting memorial exercise will be held in memory of the late president of the Trustees of the School, Mr. J. C. Poor.

Immediately following the memorial service, the meeting will be divided into sectional groups. The subjects to be discussed in these group meetings and the name of the speaker follows:

Dairy and Farm Section

Professor J. B. Abbott—"Pastures and Their Relation to Economic Dairy-ing."

NINTH ANNUAL FARMERS' DAY

TO BE HELD AT THE

Essex County Agricultural School

HATHORNE, MASS.

MARCH 15 1923

ALL-DAY PROGRAM

From 10:30 A. M. to 4:00 P. M.

SPECIAL FEATURES

Morning—Addresses by Dr. E. D. Ball, U. S. D. A.,
Commissioner A. W. Gilbert

Afternoon—Sectional Group Meetings

Women's Section

Poultry Section

Dairy and Farm Section

Fruit and Vegetable Growers Section

ALL-DAY EXHIBITS

EDUCATIONAL EXHIBIT

Corn and Seed Show

Trades Exhibit Including

Farm Machinery

Homemaking Conveniences

Professor A. F. MacDougall—"Relationship Between Farm Accounting and Farm Efficiency."

W. H. Bronson—"Massachusetts Dairying—What of Its Future?"

Poultry Section

Professor W. C. Monahan—"Poultry Diseases and Their Treatment."

Professor W. C. Sanctuary—"Breeding for High Egg Production."

Fruit and Vegetable Section

Professor F. C. Sears—"Orchard Campaigns for 1923."

Professor W. S. Krout—"Latest Methods of Scab Control."

Mr. Henry M. Howard—"Market Gardening Problems for 1923."

ORCHARD PRUNING

Have your trees been properly pruned? Most orchards need a little pruning each year to get best returns, and neglected trees are apt to need much pruning before good returns can be expected. The art of pruning correctly is one that may be easily learned by the study of good

literature on the subject, and the application of this theory to practice. Orchard pruning demonstrations are one of the best methods of finding out how to prune if you do not already know. Write your County Agent.

Women's Section

In Homemaking Department Building

Mrs. George U. Croker, president of the New England branch of the Women's National Farm and Garden Association, will explain the work from a national and state viewpoint. This is a movement which is bound to interest both men and women.

Miss Beulah C. Havens—"Truths Relating to Food and Health." State Dept. of Health.

In addition to the lecture program, there will be exhibits of up-to-date farm and household machinery, educational exhibits and a corn and seed show.

There will be no school session Mar. 15th but, instead, the doors will be open wide to welcome all who can come. Mark, March 15th on the calendar, and make a special effort to attend.

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the Essex County Agricultural School.

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CALENDAR

Mch. 15—Ninth Annual Essex County Farmers' Day.

Mch. 16—Agricultural Department closes third term.

Mch. 19—Fourth term opens in Agricultural Department.

Mch. 23—Alumni Reunion, Business Meeting and Reception.

Apr. 27—Homemaking Department, end of third term.

EDITORIALS

Some very careful work has been done recently in the way of revising the addresses and occupations of our graduates. It is a most gratifying fact to note the large number who have entered the occupation trained for. At the present time this number is standing at about 80 per cent. It is a known fact that the graduates from medical schools, law schools, and even the United States Military and Naval Academies, do not all enter the occupation for which they are trained. Our percentage is especially pleasing.

One noticeable feature which stands out strongly is that as one graduate leaves a position or receives a promotion, he immediately communicates with the School and we often have an opportunity to place another in the position thus made vacant.

As this number goes to press, our students are being released to take up their summer project work. Some are going to conduct valuable projects of their own and others are going to offer substitutes in cases where they have received positions on farms, estates, or other places offering wide agricultural experience. It is a striking fact that the School is placing students now for the 6th and even 7th consecutive year on some of the best farms in Eastern Massachusetts. Farm owners and superintendents on these places are to a large extent performing some of the duties of instructors, especially where they take such keen interest in the progress and welfare of these undergraduate students.

At this time of the year applications for enrollment begin to come in rapidly. The School, owing to its crowded condition, will soon have to create a selected or waiting list of applicants. With this sort of intensive and personal instruction, it is manifestly not possible to accept an unlimited enrollment. Those who have candidates for admission to the next class should lose no time in making their desires in this matter known.

The bill to allow the School an appropriation for the erection of a greenhouse plant has made good progress. The Committee on Counties of the State Legislature held a hearing which was well attended. Various interests, including the alumni, farmers' organizations, the grange, and the boards connected with the school, that best know its needs, were well represented and made some very clear statements. Opposition to the bill was wanting. The student body and staff are living in anticipation of the passage of the bill.

The loss to the School in the death of James C. Poor is being felt very severely in many ways. He was untiring in his work and efforts for the School. Never for a moment was he in doubt about the ultimate success of its plans. As first President of its Board of Trustees, and during a term of ten years, he has exercised a tremendous influence over its policy and growth. The Trustees are arranging a fitting memorial exercise which will be held at the School at 1 p.m. on Farmers' Day, Thursday, March 15th.

SCHOOL NOTES

The Homemaking Department presented a play "The Farmerette" before the entire student body. This was also repeated before the Pomona Grange meeting held at the school, and is to be given again before several granges in the County.

Work is progressing rapidly in consolidating the Poultry Plant. Two new brooder houses have been added.

The basketball schedule is nearly completed, March 9th being the final date. In the series with the other county agricultural schools, Essex has won three games, having defeated Bristol twice and Norfolk once.

The Senior class produces "The Turn In The Road" by G. R. Brigham on Tuesday, March 13th at 2 P. M. It is a two act play exemplifying student life at an agricultural school. The play is rich in humor and in the lessons that may be derived from it.

A Science Club has been formed to

supplement the work of the science department. The first two meetings considered the question of radio on the farm. One discussion was conducted by student Oliver Holmes of the 3C division and the other by Mr. Denman of the faculty. In connection with these meetings an exhibit was

made of radio sets brought in by members of the school. The third meeting was led by Mr. Wilson and was one of a series of three meetings to discuss the subject of beekeeping.

It is the intention of those interested in this club to invite the scientists of the county to lead the meetings which will be held out of doors with the weather permitting.

The "Green and White" will soon make its annual appearance. In addition to the regular departments, i.e., literary, athletic, social activities, class notes and jokes, the 1923 book has several new features. Instructor Wilson has compiled a complete alumni directory which alone will be worth the price of the book. The subscription is fifty cents. Please address the Alumni Editor, at the School for your copy.

The girls of the Homemaking Department are busily engaged in making new summer dresses and Easter hats for themselves. Each girl takes great pride in wearing the product of her own hands and many of the garments made are most attractive.

A very practical and instructive course in Home Nursing is being given to the girls in the Homemaking Department by Mrs. Helen S. Clay. Mrs. Clay is the wife of Dr. C. L. Clay, resident physician at the State Hospital, Danvers, and is herself a Registered nurse.

The E. A. girl's basketball team is doing creditable work under the instruction of Miss Daurice Sawyer of Danvers. Besides the regular school team all the girls who wish to learn to play basketball are being given instruction in the game. All students are taking regular calisthenic exercises under Miss Sawyer.

Owing to the severity of the winter there has been considerable sickness among the girl students, but there has been no day so bad that school has not been in session and the work has progressed satisfactorily.

EXTENSION SERVICE

POULTRY ACCOUNT PROJECT

Over 50 Active Cooperators in County
The poultry account project is proving to be one of the most popular county projects ever organized in the agricultural section of the County Extension Service. The project started in Nov. with 36 cooperators sending in complete reports. This number was increased to 44 for the month of December and to 51 for the month of January.

In return for the cooperation received by those enrolled in this project, each poultryman receives a summary showing the standing of his flock in comparison with the State and County averages. In November the average production per bird for Essex County was 3.3, December 6.2 and January 8.6. Considering the fact that the cooperators vary greatly in poultry experience, and in the size and quality of their flocks, the showing thus far made is very commendable as shown by comparing these results with a standard established by the Connecticut Egg Laying Contest for pullets in the 160-egg class, which is as follows: November 5 eggs, December 7 eggs and January 9 eggs. The use of electric lights to increase the length of the daylight during these three months is, no doubt, one of the biggest factors in making this good showing possible.

A careful study of the poultry industry will be made as a result of this project and the information secured will be used to develop it. Already striking illustrations of good production are available and data indicates clearly the value of the pullet as a producer as compared with the hen.

The final summary will be studied with keen interest as it will be the first time Essex County poultrymen will have had an opportunity to study a detailed survey of an industry that is increasing very rapidly.

TREATING POTATO SEED

How often has your potato crop failed because of some bacterial disease like rhizoctonia attacking the young seedling?

Working on the old theory "that an ounce of prevention is worth a pound of cure, and that it is "better to be safe than sorry," it is urgently recommended that seed treatment become a regular practice on the farm.

Soak the uncut tubers in corrosive sublimate solution, 4 oz. to 30 gal. water, for 1½ hours. Spread on the floor away from direct sunlight, and allow to dry before cutting. The solution may be used four times without renewing, or it may be used continuously by the addition of 1 oz. of corrosive sublimate after each batch of seed treated, and enough water to keep the original volume. The solution is very poisonous, and due to its corrosive properties it should be mixed only in wooden or earthen containers.

FILLERS

The State Department of Agriculture has just issued a revised bulletin entitled "Everyday Essentials of Beekeeping." People interested in bees would do well to send to the Department for it.

Don't forget that the County Extension Service has a good collection of bulletins and circulars for free distribution.

SPRAY SCHEDULE FOR APPLES

It will soon be time to get the spray or dusting outfit into operation. Is your equipment ready and the necessary materials on hand? Whether to use dust or spray is still a much mooted question. A majority of the growers are still using liquid sprays, and are getting excellent results. If time is an important factor, as it is with large orchardists who could not get on the desired number of wet sprays, the dust may be used, but the small orchardist had better use the wet sprays.

Here is a spray schedule that should give the desired results, but bear in mind that good results can only be obtained by thoroughness. This means using correct materials, timely application, good pressure (at least 160 lbs.) and a good reliable man at the nozzle. There is no half-way business. It's too expensive.

1st Spray—Delayed dormant spray. Apply early in spring just as buds are swelling. Commercial lime sulphur, 5 gals; arsenate of lead paste, 4 lbs., or powder 2 lbs; ½ pt. nicotine sulphate to 45 gal. water.

2nd Spray—Pre-pink spray. Apply before cluster buds begin to open, or as some of the advanced buds begin to show pink. Commercial lime sulphur 1 gal. to 49 gal. water.

3rd Spray—Pink spray. Apply when tree is in pink stage, usually from 7 to 10 days after the pre-pink spray. Commercial lime sulphur 1 gal. to 49 gal. water. ½ pt. nicotine sulphate (40 per cent.), and 3 to 5 lbs. arsenate of lead paste, or 1½ to 2½ lb. powder.

4th Spray—Calyx spray. Apply after petals fall, using same mixture as that in the "pink" spray.

5th Spray—Ten days after calyx spray, use same as calyx spray.

6th Spray—A month later, apply another spray similar to the 5th application.

7th Spray—The latter part of July or 1st week in August. Apply 1 gal. Commercial lime sulphur to 49 gal. water. This spray is for the control of the "sooty" blotch fungus.

This schedule if strictly followed should control the common orchard insects and diseases. For those growers who have trouble with apple scab, special attention should be given to the "pre-pink" and "pink" sprays.

SUGGESTIONS for the ORCHARD

Watch Your Trees

Much damage by girdling is anticipated this year. Be prepared. Examine all your trees periodically as the snow leaves. If trees are girdled, apply grafting wax immediately to girdled parts, and mound over the injury with soil. This will give the tree a good chance to recover if the cambium has not been totally destroyed, and even if it has been destroyed, the treatment will prevent the heart wood from "checking" or dying out. After one has taken the first precautions as indicated, the next thing is to bridge-graft. Space will not permit a full description of this art. Get in touch with the County Agent, telephone Danvers 50, and he will be able to give the information in detail. It would be a good plan to cut the scions at once for grafting purposes, and store them in the moist sawdust in the ice house, or in any cool moist place that may be available. For scions, cut long, 1 year old whips, selecting only the healthy growing.

A GOOD SPRAY SPREADER

The addition of 1 lb. of "Kayso" to 100 gal. of spray material insures a better spread of the mixture used thus making the spray more effective.

FEED THE TREES

Watch the growth of your trees. Many orchards are under-fed, resulting in a poor quality and also a small quantity of fruit. Poorly nourished trees are also more susceptible to diseases. Nitrate of soda is the common form of fertilizer used by successful fruit growers. This should be spread between the rows of trees about 10 days to 2 weeks before blossoming period. The amount to be applied will vary from 3 to 8 lbs per tree according to the size of the tree, its condition and system of soil management.

HOMEMADE GRAFTING WAX

Good grafting wax can be made by boiling together 4 lb. resin, 2 lb. beeswax, and 1 lb. beef tallow or linseed oil. After all ingredients have been dissolved, pour in cold water and when cool enough, pull as in making taffy. It may be stored in oiled paper.

Have you signed up for a demonstration yet? The last issue of this paper contained an outline of the program of work for 1923. If you want to act as a demonstrator, or cooperator in any project, get in touch with the County Agent.

HOME DEMONSTRATION AGENT

EXTENSION SERVICE FOR THE HOMES

Project Leader Training Groups

Two sections of Essex County have adopted the Project Leader Training Groups idea. The clothing project is being carried in this way by five communities in three towns. These communities are Cliftondale, Saugus Center, Glenmere section of Lynn, Lynnhurst and Lynnfield Center. The leaders are: Mrs. U. B. Jenkins, Mrs. A. J. McKenzie, Cliftondale; Mrs. Charles S. Jameson, Mrs. Minnie Shea, Saugus Center; Mrs. Lillian Clark, Mrs. Addie Wing, Glenmere, Lynn; Mrs. E. W. Marr, Mrs. Earl Graves, Lynnhurst and Mrs. Charles E. Joll, Mrs. C. E. Barker, Lynnfield Center. Hamilton and Wenham are carrying Nutrition work in this same way. This includes five different communities. The leaders are: Mrs. Henry Prince, Mrs. Austin Norcross, Wenham Neck; Mrs. James Hayes, Mrs. E. Leveque, West Wenham; Mrs. Grace S. Bruce, Mrs. Horace Kilham, Wenham; Mrs. Alice Woodbury, Mrs. Helen B. Cole, So. Hamilton; Mrs. Ethel M. Foss, Mrs. Fred P. Kilham, Hamilton.

HOW TO REMOVE COMMON STAINS

Water. Steam or sponge the entire surface of water-spotted materials.

Blood and Meat Juice. Use cold water; soap and cold water; or ammonia and water.

Bluing. Use boiling water.

Chocolate and Cocoa. Use borax and cold water; bleach if necessary.

Coffee and Tea. (Clear). Use boiling water; bleach if necessary. (With cream). Use cold water, then boiling water; bleach if necessary.

Fruit and Fruit Juices. Use boiling water; bleach if necessary.

Grass. Use cold water; soap and water; alcohol; or a bleaching agent.

Grease and Oils. Use French chalk blotting paper or other absorbent; or warm water and soap; or gasoline, benzene, or carbon tetrachloride (Carbona).

Iodine. Use warm water and soap; alcohol; or ammonia.

Ink. Try cold water; then use an acid or bleach if necessary.

Iron. Use oxalic acid; salts of lemon, or lemon juice and salt.

Mildew. If fresh, use cold water; otherwise try to bleach with Javelle water or potassium permanganate.

Paint or Varnish. Use alcohol, carbon tetrachloride, chloroform, or turpentine.

Pitch Tar and Wheel Grease. Rub with fat; then use soap and warm water; or benzene, gasoline, or carbon tetrachloride.

Scorch. Bleach in the sunshine or with Javelle water.

FEBRUARY PROGRAM

During the month of February, Extension Service work was carried on in the following towns and communities: Merrimac, Hamilton, Danvers, West Newbury, Bradford, So. Peabody, Cliftondale, Saugus Center, Lynnfield Center, Lynnhurst, three communities in Lynn, Peabody, Ipswich and Swampscott.

Three communities carried on projects in Nutrition, three in Household Management, five in State Clothing project, five in Garment Making and three in Millinery.

JAVELLE WATER

(For Bleaching)

- 1 pound washing soda
- $\frac{1}{2}$ pound chloride of lime
- 1 quart boiling water
- 2 quarts cold water

Put soda in granite pan; add boiling water and stir until dissolved; let cool.

Dissolve chloride of lime in cold water; let settle and pour the clear liquid into the soda; let settle. Pour off clear liquid, bottle and put away in dark place.

Use, mixed with equal parts or more of water; and do not let garments stay in over half an hour. Rinse thoroughly in several waters and lastly in diluted ammonia water.

DELMONICO POTATOES

2 cups cold boiled potatoes cut in cubes.

$\frac{1}{4}$ cups medium white sauce.

1-3 cup grated cheese.

$\frac{1}{4}$ cup buttered crumbs.

White Sauce

1 tb. butter

2 tb. flour

$\frac{1}{4}$ tsp. salt

Pepper

Cayenne

$\frac{1}{4}$ cup milk

Buttered Crumbs

$\frac{1}{2}$ cup fine cracker or bread crumbs

$\frac{1}{2}$ tb. butter.

Melt butter in small sauce pan or bowl on back of range. Add crumbs. Stir with fork.

Make white sauce in double boiler. Add potatoes and cheese. Turn mixture into baking dish. Cover with buttered crumbs. Brown in oven.

ITALIAN SAUCE

(To serve with Spaghetti and Cheese)

2 cups tomatoes

1 small or $\frac{1}{2}$ large onion (diced)

$\frac{1}{2}$ tsp. salt

Pepper, cayenne, supposed to be rather hot

$\frac{1}{4}$ tsp. cinnamon

May add clove if liked.

Cook all ingredients together. Strain, reheat and cook until about as thick as catchup.

Serve cooked spaghetti to which a small amount of butter has been added. Add sauce and one teaspoonful of grated cheese.

COUNTY CLUB AGENT

BIG CLUB DAY AT BEVERLY

The Loyal Forces Gather for a 4-H Celebration at the Stronghold of Club Work

The 4-H Club of Beverly held its Achievement Rally on February 6th at the Beverly Health Center. The club members not only came themselves but brought their mothers and friends to see what had been accomplished in the Club Work.

The Achievement Rally brought out some interesting facts. Chief among these was the presentation of the pin awards for last season. These pins are shaped like 4-leaf clovers and are given in recognition of the completion of all requirements for a season. Bronze pins are given for first-year work, silver, for second, gold for third and for fourth year work, national certificates are given. Five certificates were given to the Beverly Club. That means a lot—five girls who have been in Club Work for four years. Fifteen gold pins were given to girls who had been in for three years, and twenty-five girls received the silver pins for second-year work.

The entertainment was furnished by club members. The meaning of the club insignia, the 4-H clover, was explained in an attractive way: "Head" by the canning members; "Heart" by the Big Sister members; "Hand" by the Home Economics members; and "Health" by the handicraft members. Madeline Walker, twice a county champion, and a member of the demonstration team that represented Massachusetts at the Eastern States Exposition, told about her trip to that exposition. Dr. Henry Yeo, President of the Rotary Club, expressed the outside interest in club work as a whole. He mentioned the interest of Rotarians all through the country in worth-while work done by boys and girls and made a personal appeal to the club members to make themselves good citizens by loving their churches, their homes, their schools, and their country.

Beverly is but one place in thirty where our county has club work in progress. The record Beverly has made is an enviable one and more will be heard from Beverly later in 4-H Club circles.

GIRL WINS 1922

PIG-RAISING HONORS

Eunice Sellers of Andover bought a pig last June for \$10.00 and at a total cost of \$35.31 she completed her club work with a net profit of \$22.49. Miss Eunice, as County Pig Club Champion, will be entitled to a week at Amherst this summer.

Second place went to Benjamin Austin of Amesbury, a student at Essex County Agricultural School. His net profit was \$21.60, making him a close competitor.

ESSEX FARMER ^A_N HOME MAKER

Published By-Monthly by the Essex County Agricultural School

Vol. 4

HATHORNE, MASS., MAY, 1923

No. 3



PRACTICAL INSTRUCTION ON THE SCHOOL FARM

CHOOSING A VOCATION

Every boy and girl of fourteen should begin to think of doing some part of the world's work. Choosing a vocation is an important task and a very difficult one for most of us. Some never make a choice but take the first job that comes along, and later drift from one place to another, rarely making a success. But those who do decide early on a life work and prepare themselves for it usually succeed.

This school gives a preliminary training in the following subjects: Vocations in agriculture and home economics:

Beekeeper	General farmer
Florist	Landscape Gard.
Farm foreman	Poultryman
Gardener	Truck farmer
Herdsmen	Homemaker
Market Gardener	Dressmaker
Stock raiser	Milliner
Dairyman	Child's nurse
Forester	Nurse
Fruit grower	Mother's helper

These are only a few of the many vocations in agriculture and home economics but the list will help you to realize the opportunities in just these branches of the world's work.

If you know a boy or girl who is interested in any of the above occu-

pations, you will help them by telling them of this school. We are now enrolling students for next September, and indications point to a record class. As our present facilities are limited, especially in the Homemaking Department, it is wise to make application for admission at once.

SEASONABLE NOTES

Articles have been appearing from time to time in the local press by Mr. William Roop, who is the Federal Agent for Essex County for the Control of the White Pine Blister Rust. More detailed information may be obtained from him by addressing him at the School.

The Commissioner of Conservation is warning against spraying for the control of the White Pine Blister Rust. The very nature of the blister rust itself precludes any control by means of spraying.

There seems to be an abundance of tent caterpillars. If the gypsies and brown tails have not been previously controlled, a good spraying of arsenate of lead will hit all three of these troublesome insects.

In some sections the late cold snaps have destroyed the buds of the cane fruit.

SCHOOL STATISTICS

Enrollment has Doubled in Five Years

This year is the tenth anniversary of Essex Aggie. The first students in the Agricultural Department were admitted October 1, 1913. The Homemaking Department was organized a year later, admitting students in September 1914. Two years after this, in November 1916, the first class was graduated with members from both departments. Since then seven classes have graduated with a total of 193 students; 112 in agriculture and 81 in homemaking.

The table given below shows a comparison in the enrollment of the present year with that of five years ago:

	1922-23	1917-18
Total enrollment	327	162
Agricultural	221	126
Homemaking	106	36

These figures show that the total enrollment has more than doubled in the last five years. There are several valid reasons for this rapid growth. First, vocational education is making a strong appeal to boys and girls who are ambitious to earn their own living. It actually trains boys and girls to become self-supporting at a very early age. Even during the school course, the students have unusual opportunities to earn money.

Second, more parents are beginning to realize that vocational schools are the means of creating new interest in the lives of many of our boys and girls who for one reason or other were unsuccessful in the regular school system.

Third, broad-minded public school authorities are beginning to see the need of vocational training, and are encouraging young men and women to attend vocational schools.

INSTRUCTORS AT ESSEX AGGIE ENJOY LECTURE BY DR. DAWSON

The address of Dr. Charles Dawson of Springfield Y. M. C. A. College, on Friday, April 20, before the entire staff was greatly appreciated. He treated the subject of educational measurements and standards in a most able manner. He was accompanied by agents of the Department of Education.

Plan to be at the Market Garden Field Station on August 5th. Many varieties and strains of the most important vegetables will tell their true story of character.

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the Essex County Agricultural School.

A BI-MONTHLY PUBLICATION SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

June 5—Homemaking Dept. Parents' Day.
Aug. 8—Vegetable Growers' Field Day at Lexington.
Aug. 15—Chebacco Pomona Field Day at Hathorne.

EDITORIALS

When the School was established in 1913, the Trustees made a very careful geographical apportionment of scholarships. During the war, when the enrollment ran low, this plan was abandoned and students were even admitted by the payment of tuition from outside Essex County. As the enrollment was again built up, non-resident students have been excluded. At the present time there is reason to believe that the offering of students in both departments will exceed capacity. The School has only moderate facilities in the way of teaching staff and equipment. For this reason admission will naturally be somewhat curtailed. Every effort will be used to select those best qualified to benefit by this type of instruction. To accomplish this purpose the School will work in the closest conjunction with school superintendents, principals, and teachers, and will aid parents in making their decisions and choice of courses. Everyone interested in admission of students for the incoming class should make their decisions known at a very early date.

More and more are the friends of the School appreciating the value of the School project system and of the summer vocational training and guidance. Every student who leaves the School takes up an active summer project.

Many of the boys go onto very progressive up-to-date farms where the owner or manager usually becomes very much interested in the training

of the student. In this way many of the leading farmers are practically members of the instruction staff of the school.

The students have this year been able to establish good large home projects or secure employment which is paying them in an ample way. The gross earnings of the students this year will be a very large sum. Many students use this income toward the payment of their expenses for the next school year.

SCHOOL CREDIT FOR APPROVED SUMMER READING

Books on Science, History and Agriculture Included in Optional Readings

The English Department of the School offers a summer reading course for students who may wish to secure additional credit in English or for those who may have failed to receive passing credit in this subject. The summer reading course will be of special benefit to those students who are planning to go to college after graduation. Credits toward a diploma will be given for any part of the work satisfactorily completed.

If you wish to begin the course, request further information from the English Department of the School.

ESSEX-METHUEN TRACK MEET

Summary

100 yd. dash: Won by Maxwell (E); Hanigan (M), second; Bennett (M), third; time, 11 2-5 sec.

1 Mile run: Won by Whittier (E); Sargent (E), second; Wade (M), third; time, 5 min. 22 2-5 sec.

Running Broad Jump: Won by Maxwell (E); Sontag (M), second; Wilcut (M), third; distance, 18 ft. 11 in.

440 yd. Run: Won by Sontag (M); Dwyer (M) second; Dunnells (E), third; time, 57 2-5 sec.

Shot Put: Won by Wilcut (M); Sontag (M), second; Holmes (E), third; distance, 36 ft. 9 1-2 in.

Half Mile Run: Won by Whittier (E); E. Roberts (E), second; Sargent (E), third; time, 2 min. 24 2-5 sec.

220 yd. Dash: Won by Maxwell (E); Hanigan (M), second; Bennett (M), third; time, 27 4-5 sec.

Running High Jump: Tie between Maxwell (E), Coukos (E), Holmes (E); height, 4 ft. 9 in.

Relay Race: Won by Methuen (Bennett, Moore, Banford, Hanigan); Essex (Dunnells, Coukos, Emerson, Maxwell).

Meet won by Essex Aggie 43 to 34.

Lettuce seed makes a good "marker" with dandelions. Turnip seed can be used as a "marker" with celery.

ESSEX WINS TRACK MEET FROM METHUEN

Maxwell Scores 18 Points in Closing Event of Year

Before a good sized crowd and with ideal weather conditions, Essex Aggie won its closing athletic event of the season—the Methuen-Essex Track Meet—by a score of 43 to 34. The meet was very close at all times and each event was hotly contested. By winning 6 out of the 9 events and getting an even break on the second and third places Essex kept well in the lead throughout the afternoon.

Whittier won both the mile and half mile runs and was the dark horse of the day. Maxwell was the star of the meet, winning both the sprints in good time, breaking the Essex School record in the broad jump and tying with two other team-mates in the high jump. He scored 18 points and very fittingly closed a brilliant career in Essex Athletics. He is a member of the 1923 class.

Sontag was high point winner for Methuen with 11 points and ran a beautiful race in the 440. Wilcut was the other Methuen first place winner, taking the shotput. Essex won all three places in the half mile and high jump. In the latter event, Maxwell, Coukos, and Holmes stopped jumping when the last Methuen man missed 4'-9".

FOOTBALL SCHEDULE

The football schedule as announced indicates a shorter season and games with teams in our own class. Stoneham High is a newcomer and several teams have been dropped. There will be a large percentage of the games at home and this ought to work out successfully.

The season opens Columbus Day at Danvers Park with Manchester. The October 20 date is open, due to cancellation by Gloucester. Pinkerton will probably fill in here. On Oct. 27 Stoneham gives us our next game at home. Nov. 3 we play Methuen at Methuen. Nov. 10 is the date for the return game at Manchester. Nov. 17 will see the climax of the season with our sister school, Norfolk Aggies of Walpole. This is to be a home game this year and it is planned to make this the biggest event of the season. A game on Thanksgiving Day is pending. The school has already refused offers to play at Amesbury, Melrose and Newburyport. It seems quite probable that Sanborn Seminary of Kingston, N. H., will be given a place on the schedule.

At a recent meeting of the letter men J. Edwin Lombard of Everett was elected captain of the 1924 Basketball team.

WITH THE COUNTY AGRICULTURAL AGENT

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cat. Adult birds will eat about an ounce per day. Our birds, as a whole, have never laid better; eggs have never hatched so well; chicks have never grown so rapidly and I believe our mortality has never been so low. We do not claim these results are attributed to mangels, but they have played an important part.

Succulents in the form of cabbages, sprouted oats, lettuce, etc. will give as good results and some of them perhaps better. However, we emphasize MANGELS because of the ease with which they can be grown, fed and stored; the large yield per acre, low cost and good keeping qualities.

Many of the older poultrymen know the value of roots of this nature and feed them generously. Others do not. The writer has received a large number of letters the past winter inquiring where mangels or beets could be purchased.

I suggest that a drive be made this spring to get poultrymen to raise MORE MANGELS or other succulents if they have the facilities. If not, get someone in each locality to raise enough for the poultrymen within a reasonable radius. One farmer recently called the writer on the phone

and asked me to specify specifically the terms of the agreement which shall provide for a bonus for inducing more interest in the farm, and for the purpose of insuring steady and competent help. The bonus of course could be a stated amount or it could be on a sliding scale percentage, based on the labor income of the farm.

A detailed plan embodying these principles has already been submitted to one party upon request, and the county agent would be glad to go over the situation with others interested.

NEW POULTRY FEED READY

Those who have watched the enthusiasm accorded the Eastern States Open Formula dairy rations since last summer will not wonder that the Exchange has found it necessary to develop the same kind of service for the poultrymen. The new Open Formula poultry feeds are offered for sale, ready mixed, under the Eastern States brand; also their formulae are published for the home-mixing poultrymen; just as the Dairy Rations were last year open to all dairymen. The egg mash is to be included in the grain pool this fall.

NEW M. A. C. POULTRY CORRESPONDENCE COURSE POPULAR

Already several hundred poultry keepers in the state have enrolled for the new correspondence course in poultry and it is pronounced highly satisfactory to those who are taking advantage of it.

The course is so arranged that one can apply the seasonal information received on his own plan.

These courses are completed in a year's time. The unique feature of it is that enrollments may be made at any time, completing the course a year from the time of enrolling rather than at any specified date.

The enrollment fee is only \$5.00. If interested, write to the Supervisor of Short Courses, Massachusetts Agricultural College, Amherst, Mass.

WHAT CROPS NEED LIME

These crops respond well to lime treatment:

Asparagus, Beets, Cauliflower, Celery, Egg Plant, Leeks, Lettuce, Muskmelon, Onions Parsnips, Salsify, Spinach

The following crops are less sensitive to acid soil, but still pay a profit for liming:

Cabbage, Carrots, Chard, Swiss, Cucumbers, Kale, Horse Radish, Peas, Peppers, Pumpkins, Tomatoes.

These crops are indifferent to acidity:

Brussell Sprouts, Beans, Corn, Dandelions, Endive, Kohl-rabi, Rhubarb.

Some crops even do best on acid soils such as Cress, Parsley, Potato, Radish, Squash Turnip.

It is also interesting to know that the following small fruits:

Strawberries, Blueberries, Cranberries require acid soils for best results.

Write to the county agent for the latest circular on "Spraying the Apple Orchard." It is the best one put out by our Station, and should be in the hands of every orchardist.

CABBAGE MAGGOT CONTROL

Are you going to control cabbage maggots this year or let them control your crop? Good success was reported last year by those who tried applying a solution of 1 oz. of corrosive sublimate to 10 gallons of water around cabbage plants. Use about a half a cup full of solution to each plant and make at least two applications, the first one 3 days after setting out the plants and the second one 8 to 10 days after the first.

WITH THE HOME DEMONSTRATION AGENT

CLOTHING

"The old saying that the human person is composed of three parts—soul, body, and clothes—is more than a joke," says William James. Henry Ward Beecher is more moderate in his statement when he says that "Clothes do not make the man but they make him look a lot better after he is made."

Clothes are what financiers call "a good risk." They give self-reliance. To be successful, appear successful. The woman who works must be well dressed if she is to measure her full capacity for success. Women have been criticized for spending too much thought on dress. The criticism should be that women do not spend enough intelligent thought on dress, to understand the art of good dressing shows wisdom, not vanity.

That the function of dress is not limited to protection and modesty is very evident. Witness the devotees of the goddess Fashion going about the streets on cold, rainy days in thin silk stockings and equally thin slippers, enduring for her sake all the discomforts of wet feet and attendant evils. Pity for the pretty young girl in immense white furs, sipping iced soda in a stuffy booth on a hot day, is wasted. Fashion knows no pain. Our fur-clad young friend is conscious of her resemblance to a fashion illustration. What more could one desire?

Love of change, extreme individuality, commercial interests, and even national events are a few of the roots of fashion. For example, a woman of strong personality goes to a modiste who creates a gown for her, suited to her personality, type and temperament and also for a particular occasion. The gown is worn in public places, is copied by fashion illustrators, and finally is adopted as the "latest style" and worn by hundreds of women over the land, for whom it is not suited. Again, commercial interests demand frequent changes both in design and weave of textiles. If we appear in stripes like awnings this season, next season will behold us clad in spots like clowns; otherwise we might wear our clothes two seasons, contrary to the intentions of manufacturers. A dressmaker once said that she could not continue her business unless the silhouette changed at least once a year.

Women have a powerful weapon as purchasers. It is not the tradesman's office to tell us what we should have; his duty is to distribute what we demand. It is our business to see that the demand is intelligent.

Every woman should study her own individuality, her own proportions, lines and coloring, her defects as well as her good points. She should study herself in the same impersonal manner in which she studies other people. Is the head small? Is the waist too long for the height? Is the neck short? Are the shoulders high? After honest, critical study she should choose only those clothes which are suited in proportion, line and color to her particular type, subduing her defects and emphasizing her good points. If clothes exactly suited to her may be found in the fashion magazine, she may adopt them. When a woman thus finds by intelligent study the type of dress suited to her particular self, she should cling to that type even though it brings disagreement with prevailing modes. This does not necessarily limit one to the point of having all one's dresses made exactly alike. The essentially personal features may be retained while still permitting sufficient latitude for fashion. In this way fashion can be made to serve us and we shall cease to be her slaves.

Few women make a clothing budget. If they did they could not follow the vagaries of fashion so easily. A budget requires a certain portion of the income to be set aside for clothes, also a plan, usually made on a three-year basis—two important limitations. If one has an evening coat which is a part of a three-year plan, it cannot be discarded (granting that one has sufficient self-control to resist the temptation) simply because there is such a "darling" on sale for only \$29.98. A budget may thus control expenditure and check extravagance. A budget planned on a three-year basis also leads toward conservation in dress. If a woman plans to use a garment three years, a tailored suit for example, she is careful to have about it nothing by which the exact year of its birth may be ascertained.—Leona Hope, University of Illinois.

"We Americans will remain virtuous as long as agriculture is our principal pursuit; when we get to be piled upon one another in large cities, as in Europe we shall become impoverished as they."—Thomas Jefferson.

WITH THE COUNTY CLUB AGENT

SEEKING THE BEST FOR FARM AND HOME

By Geo. L. Farley, State Club Leader

Junior Extension Work

The Extension Service of the Massachusetts Agricultural College recognizes that the family is the unit of organized society; recognizes that the young people are a part of this family group; and it is therefore endeavoring, as it carries demonstration in agriculture and home economics to the family group, to reach the young people.

The work divides itself into three parts: home and school garden work, junior club work, and junior farmer work.

Home and school garden work seeks to interest the younger people in growing a garden of any size anywhere that flowers and vegetables will grow.

Junior club work seeks to interest young people between the ages of ten and twenty-one; inclusive, in one or more of twenty farm and home projects.

Junior farmer work is being developed to aid former club members between the ages of eighteen and twenty-one who seek to make agriculture their life work. The same projects are carried on as in junior club work, but the demonstrations are made more intensive.

HOME AND SCHOOL GARDENS

This work is intended for both boys and girls of any age, and is designed for the purpose of furnishing them with both pleasant and profitable occupation. It is intended to interest large numbers of young people. In addition to the planting and cultivating of a garden there should be a study of the principles of cultivation of both flowers and vegetables. The work may be done either in the school plot or at home, and becomes the connecting link between home and school activities. The success of this work requires adequate supervision.

JUNIOR CLUB WORK

Each person who enrolls will be required to sign an enrollment card that will be furnished.

Where it is possible to secure an enrollment large enough, the policy is to organize a club with officers and rules governing the organization. (A suggestive constitution will be furnished on application).

In sparsely settled communities, where there are not enough members to form a club, young people are not denied the privilege of enrolling and doing the work.

A project is any piece of productive farm or home work organized through the schools or any other recognized and approved agency, and carried out at the home under proper instruction and supervision.

CLUB WORK—WHAT IT IS

Boys' and Girls' Club Work is a nation-wide movement which gives rural boys and girls an opportunity to develop themselves educationally, economically and socially.

It is a movement which demonstrates the better practices in agriculture and home economics.

It makes play out of work.

It promotes industry and thrift.

It applies business methods to farming.

It develops self-reliance, ambition and aggressiveness.

It fosters individual ownership, a love of nature and the things in the open country; it makes farm life attractive.

Through contests it brings out the best efforts and thought.

It stands for the four-fold development of the Head, Heart, Hands and Health.

Its slogan is, "Make the best better."

And, above all, it develops the highest type of manhood, womanhood and American citizenship.

National Committee on Boys' and Girls' Club Work, G. L. Noble, Secretary.

HOW ANY COMMUNITY MAY HAVE CLUB WORK

Get some organization or group of people to agree to start, follow up and see to the finish some phase of work.

Get in touch with your local county Extension Service or with the Massachusetts Agricultural College, Junior Extension Service.

Get together a group of young people (five or more preferred, although work can be carried on with fewer).

Organize these young people into a club and find some adult, or local leader, who will help the young people as occasion requires.

The County Club Agent or State leader will plan out with the local leader the best work to carry on, and the rules governing the work.

The young people will be ready at this time to start.

SUMMER SEASON STARTS

Enrollment Work for Whole County Completed Before May 1st

Ever since the roads have become passable the County Club Agent has been visiting the Club Centers of the County, speaking to assemblies of school children in the interest of the Club work. The work was helped greatly by the splendid co-operation of the various school superintendents and principals who are in charge of schools visited. That 4-H Club work is an asset in a school is evident by the spirit in which the majority of school authorities welcome it. Many schools even give school time for an occasional club meeting, the principals saying "Club work teaches things which are as important as school work." This is particularly true in the strictly rural sections of our county.

Interest in Garden, Pig and Canning Clubs has been average this spring. Only the towns where interest in the past has been good have been canvassed for members. Appearances indicate a garden club membership of about 400, the same for canning and only a sprinkling of pig club members. In another column the main objective of this summer's work is defined.

NEW OBJECTIVE IN CLUB WORK

Effort to Keep the Stickers Sticking—New Attempt by Club Agent

One big objective which the County Club Agent is driving toward is to enroll the club members who are most interested for several successive seasons. We have members who have been in Club Work for five years but the tendency has been to approach the same grades in the same schools year after year, this, of course, resulting in hardly ever offering club work to the same group more than two successive years. Many of the past members have entered high schools and these boys and girl should continue to interest themselves in Club work.

Club work is to help others. What a help it will be if the County Club Agent can instill in the hearts of some of our high school pupils a love for the agriculture and homemaking that have been the saving powers in every nation that has succeeded.

Seventy-two per cent of the earners of income in America receive less than \$1,500 a year. Fourteen per cent more earn less than \$2,000.

EXTENSION SERVICE

QUESTIONS AND ANSWERS

The following information has been asked for by various individuals, and the answers given by members of the college staff. It appears here for the help it may be to others.

Preventing Premature Dropping of Fruit

Question:—How can I prevent half developed fruit from falling off my trees?

Answer:—Long range diagnosis is rather dangerous, but I should say that the first thing your fruit trees needed was a little something in the way of fertilizer. Unless the trees are making a vigorous, healthy growth, it will help them a great deal to set a good fruit crop and to carry it through to maturity if you can apply stable manure early this spring before the trees start to grow, or give them a dressing of some commercial fertilizer which has a high percentage of nitrogen.

You will also have to spray the orchard if you are going to grow good fruit.

San Jose Scale

Question:—How shall I spray to prevent the San Jose scale?

Answer:—San Jose scale seems to be returning again. I have noticed it in increasing quantities in various parts of the state. The scale can be killed by spraying the trees with liquid lime sulphur, about one gallon to eight gallons of water, when the leaf buds are just beginning to show green in the spring, or, if the case is very severe, it may pay you to spray with one of the miscible oils, such as Scalecide, early in the spring.

Columbian Raspberries Profitable

Question:—Last year I set out 50 plants each of several varieties of raspberries. Only the Columbian purple did well. Do you advise for or against this variety for home and market?

Answer:—It is evident that you can grow Columbian raspberries very well on your land. I should think that it might be an excellent variety for you. The only drawback might be the market. The berries are rather dark in color and when they have to compete with an abundance of bright red berries, they sometimes move rather slowly. In most of the markets in this state, however, there are not enough red berries to give the purple ones much competition. The Columbian raspberry will outyield any other variety I know, and if you can sell the berries to a good advantage, I

should think that it might be a very profitable variety.

Pear Scab

Question:—My Duchess pears split and break open when ripening. What is the cause of this?

Answer:—While it is rather difficult to be sure of any fruit tree disease without having seen the disease, I am quite certain that your pears are infested with Pear Scab. This trouble can be controlled by careful spraying, but since your trees are so badly infested, you will probably have to spray about three times in order to bring it under control.

The first application should be put on when the blossom buds are beginning to show pink, and well before the blossoms open. Use liquid lime sulphur, one gallon to six gallons of water, or dry lime sulphur in the proportions recommended on the outside of the package. The same material should be applied again as soon as the petals have fallen. Add to this spray a pound and a half of powder dust made of lead, or three pounds of the paste form.

The third application should be made about three or four weeks later. Use the lime sulphur and water and omit the arsenate of lead, unless there are some leaf-eating insects around.

Three Demonstrations to Control Apple Scab

The following men are to co-operate in demonstrating that apple scab may be controlled by proper spraying: George Averill, Andover; R. N. C. Barnes, Andover and D. W. Reynolds, Haverhill. The county agent will watch results closely and report results later. It is probable that a field meeting will be arranged for the purpose of allowing all interested an opportunity to observe these orchards.

POULTRY ACCOUNT PROJECT GOING STRONG

A study of the 40 March accounts received from Essex County co-operators shows that the average egg production per bird for this month was 15.3, compared to the state average of 15.5. The highest record for the state involving 178 co-operators for the same month went to Zenas H. Kelley, Hyannis with a score of 23.1. Frank E. Owen of Marlboro was second with a score of 23 and third honors fell to Essex County to James A. Wood, Methuen, with a record of 22.1.

While the project was not started as a contest, the monthly reports issued regularly seem to have developed a friendly rivalry, and aids materially in keeping the project a live issue.

(Continued from Page 5)

WHAT CLUB WORK MUST TEACH

Club work must instill into the minds of young people some of the great underlying principles which make for success in life. Club work leads young people to see that opportunities in agriculture are as good here in Massachusetts as in any other section of the country; that one does not have to go searching the world over for success, but can find opportunities all about him if he but seeks diligently for them.

Having undertaken the task, determined upon some project, and received broad, general directions for demonstration, the club member must go ahead and perform that task for himself. He must depend upon his own resources, develop his own ability, accomplish what he sets out to do, and depend as little as possible upon others.

Club work teaches that one of the greatest joys in life is to serve others. As some one stands ready to teach the club member the fundamental facts, he should be willing to help other young people, and pass on the information which he has gained.

Club work presents obstacles to overcome. Though failure will at times overtake one, no matter how careful he may be, if he is to succeed he must rise above his failures, overcome all obstacles, keep his eye fixed upon the definite goal, and keep at it until that goal is won.

PLAN OF ORGANIZATION

Junior Extension Work is a carefully organized effort of the United States Department of Agriculture co-operating with the Massachusetts Agricultural College and the County Extension Services, to interest as many young people as possible in the best practices in agricultural and home-making.

The aim of the work is to make clear to young people the need and dignity of agriculture.

That the security of the nation depends in large measure upon well-organized, happy homes.

WHAT MAKES THE WORK A SUCCESS

The only degree of success we can hope for in any club in a community will be the result of the efforts of some local leader. Some one who, with a desire to help young people, is willing to give time and aid them in self direction. Are you willing to be a leader? Is there some person in the community who will so serve? The all-important need is a local leader. Do not start anything without a leader.

HOMEMAKING DEPARTMENT NOTES

All students are given an opportunity during each year to visit factories, mills, and exhibitions of educational value, under supervision and most of them avail themselves of this opportunity.

In March the junior class with four instructors visited the Lowell Textile School, where they spent the day in studying textiles and the manufacture of cotton and woolen goods. Mr. Smith, the Principal of the school, kindly gave his time to explain the different processes. Lunch was served at the school.

In April the senior and high school special classes, under the guidance of Miss Erickson and Miss Irish, visited Faneuil Hall Market where Mr. Arthur Dorr gave a demonstration in meat cutting which was greatly appreciated. In the afternoon a visit was made to Baker's Chocolate factory where the girls were taken over the factory and saw the work in its entirety.

On April 26th about thirty students with Miss Erickson, Miss Browne, and Miss Day visited the Home Beautiful Exposition. This exposition is an ideal place for students who are taking a homemaking course and the girls were allowed to browse among its many interesting exhibits and absorbed many new ideas.

Miss Browne, assisted by Dorothy Wiggin and Gertrude Jones, gave a demonstration before the Chebacco Pomona Grange at Georgetown and another at the Middleton Grange at Middleton, in the making of a ribbon hat and in making rosettes and ribbon flowers for decorating gowns and hats.

The faculty and students of the Homemaking Department are planning a Parents' Day, to be held on June 5th, when they wish to welcome all the parents of the students and friends of the School. A pleasing program is being arranged which will include an entertainment, exhibits of some of the work done during the year, and an interesting speaker.

CLOTHING

The new summer styles are most attractive and very easy to make. Altho the skirts are longer, the combination of colors makes it possible to get up a dress for less expense than is often the case. If one has two old dresses whose colors go well together, or a coat and skirt too much out of style to use, they can be easily made into one of the straight-lined, long-waisted gowns; or even should the skirt and sleeves of a short-waisted dress be in good condition, a small piece of new material in harmonizing or contrasting shade for the upper part of the dress will make an at-

tractive and stylish gown. Now is also a good opportunity to use remnants which can also be bought more cheaply than from the piece. Bright colors and mixtures are much used.

The use of applique on summer dresses gives an attractive touch. A few scraps of bright colored material cut in flowers, fruit, or leaf designs, and sewed to the material with the old fashioned blanket stitch, will add just the bright, showy touch that will turn a dark, sombre gown into a thing of summer beauty. Any cotton material of good fast colors can be used, thus giving the designer a chance to use her own taste in colors and design.

HONOR ROLL

The Honor Roll in the Home Making Department for the third quarter is as follows:

Hazel Eastman, Lynn	94.9
Leslie Wagland, Methuen	93.4
Gladys Hulsman, Lynn	91.2
Marjorie Rowe, Lynn	90.7
Rose Logue, Salem	90.2
Margaret Greenleaf, Lynn	90.0
Ruth Gay, Lynn	89.0
Gertrude Smith, Methuen	88.6
Marjorie Livingston, Andover	88.5
Elizabeth Cronk, Marblehead	88.4
Elizabeth Wagland, Methuen	87.8
Doris Goodwin, Swampscott	87.0
Creditable Roll:	
Grace Bixby, Lynn	86.6
Rae Reid, Georgetown	85.8
Rosa Hill, Marblehead	85.7
Anne Sanford, Hathorne	85.5
Janet Dyer, Danvers	85.3
Madeleine Walker, Beverly	85.2
Blanche Atherton, Lynn	85.0

FRESH VEGETABLES

Try once again this summer to teach your family to eat fresh vegetables. Strange, isn't it, how many farmers' families do not eat the vegetable product of the farm. If turnips, beets, and cabbages are proper food to sell to city people for home consumption, they are also proper food for the producer. The old saying that "Shoemakers' wives always go barefoot", might be amended to read "Farmers' wives never eat vegetables." Vegetables contain many of the essentials of life, and the sooner the children are taught to eat them, the better for their present, and more especially their future, welfare.

Many people say, "I never eat vegetables and look at me!" Well, they never can prove how much better they might look and how much healthier they might be, and since scientists have proven that vegetables contain essentials to the health of the human race, we should teach our children to eat them, in spite of the fact that some people have lived in spite of not having conformed to the laws of health.

SCHOOL NOTES

During the recent Garden Week, Messrs. Mitchell and Wilson of the School Staff were in attendance at Almy, Bigelow and Washburn, Inc., Salem. These instructors were present to answer questions on vegetable and flower growing. The general public took great interest in the collection of garden books and also in the displays of flowers and vegetable seedlings.

John Lombard, class of 1924 has purchased Hepsy Smith, a purebred Holstein cow. This cow was sired by Maud Burke Bond and is the daughter of Louisa Bon Segis. The animal was bred and owned by D. L. Struble of Port Byron, N. Y. Lombard has shipped the animal to his father's farm on East Street, Ipswich.

Miss Anne K. Sanford is serving as School Librarian.

With the closing of the term nineteen of the boys have secured work on the School Farm and Gardens. In the garden division, nine boys are employed under the supervision of Instructors Stowell and Stearns. Three students each are employed in the poultry and grounds divisions, while the fruit and farm divisions have two students each. These boys are extremely fortunate to be chosen for employment at the school because of the wide range of the work and also because they are under the direct supervision of instructors at all times.

The School does not expect an infestation of gypsy and brown tail moths this year. The pupils spent some time this spring in cutting and burning the brown tail nests and painting the gypsy eggs with creosote.

GREEN AND WHITE

The annual Senior publication has been issued and has met with a ready sale. The book has several additional features including a splendid cover design and a full page cartoon, both the work of student Wesley Maxwell. '23, of Lynn.

In the Green and White prize story contest, Miss Viola LaPierre, Lynnfield won first prize and Miss Grace Bixby of Lynn was awarded second prize.

The Alumni Directory is complete, containing the name of every Essex Aggie graduate together with his or her present address. Every alumnus will find the directory a valuable guide. If you have not already subscribed, a copy will be mailed to you on receipt of 50 cents.

AGRICULTURAL STUDENTS NOW AT WORK

A Few Noteworthy Projects

It may be interesting to some who are unacquainted with our work to know that at the present time all the agricultural students are busy working on the home farms or are employed on some other farm or estate. The summer project is being made to contribute more and more to their education. The students are encouraged to keep accurate records, agricultural observations are noted, and investigations are made on some phase of the work.

The financial returns of a project, although of secondary importance, have always been a matter of concern to the students. Some of our boys during the summer months earn more than enough to carry them through the next school year.

The fact that most of our boys are interested in the work which they are doing is encouraging and indicates that this School is doing a great deal to prepare boys for useful lives.

The following noteworthy projects for this summer have come to our notice:

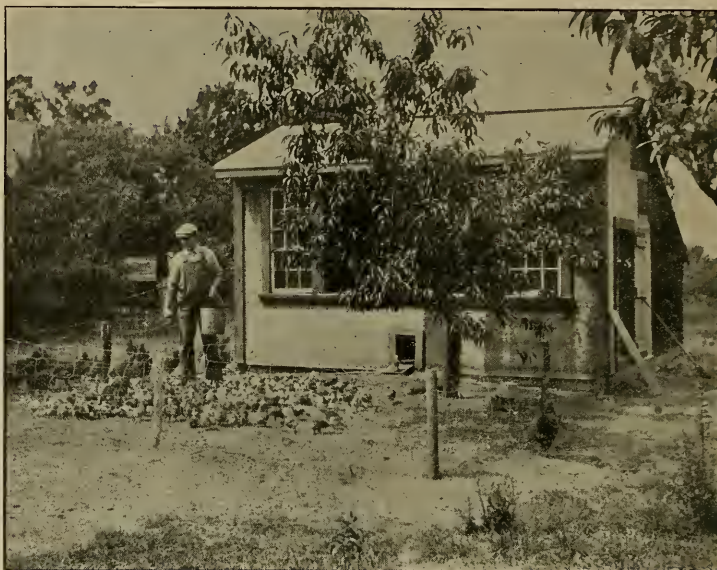
Students Donald Anderson and Alton Perkins of Lynn are employed at the Market Garden Field Station in Lexington under the personal direction of Professor H. F. Tompson. This is an exceptional opportunity for these students to become acquainted not only with the most up-to-date methods but to gain valuable knowledge and experience in the growing and handling of the different varieties and general experimental work which is being carried on for the benefit of the Market Gardeners of the State.

Eric Bergstrom is again at the Burrage Gardens in Beverly with greatly increased responsibility. He not only has entire charge of the range of general greenhouses but has been given additional responsibility in the shape of supervision of two of the special orchid houses.

Robert Ewing is located on the fruit farm of Clemens Brothers in West Acton. They have forty acres of trees and are setting out a new twenty-acre block. His reports are ample and varied.

The work of an Essex Aggie student at the Wildacres Farm in East Greenwich, Rhode Island, was so satisfactory last year that a call came in this spring for two students. The positions have been filled by students John Sullivan and Charles O'Keefe, both of whom gained valuable experience on the School Farm last year.

An outstanding opportunity in the dairy line is that of Student Wendell



FEDERAL STUDENT CURRIER AND REMODELED BROODER HOUSE

R. Murray, who graduates in November. Sent out on a hurry call to care for some Guernseys, (imported by Lieutenant-Governor Fuller) while they were at the Quarantine Station, his work with them during the month was so satisfactory that he has been engaged as herdsman for the Lieutenant-Governor's entire herd on his farm at Little Boar's Head, New Hampshire.

Student Harold Dowding has an exceptional opportunity in a home project in poultry. He is caring for 700 laying birds and he and his father have purchased 1600 chickens to raise.

Students Carleton Carter and James Silva of this last year's IIC division are located at the Crane Estate in Ipswich, under the supervision of one of the county's most noted gardeners, Mr. Robert Cameron.

A noteworthy freshman project is that of Student Elmer Demeritt, who really has an entire farm enterprise on his hands, including garden work, fruit, dairying and poultry. He should certainly be able to keep busy.

Among the noteworthy Federal projects are those of Student Howard Martin, who is foreman of the poultry plant on the Borderline Farm; Student Walter Moore of the Senior Class who has supervision of the Federal Students at work on the poultry plant at the Vocational School at East Norfolk; and Alfred R. Smith, who is establishing a large market garden and poultry project in Marblehead with prospects of wonderful marketing opportunities.

NOTES CONCERNING VETERAN STUDENTS

Schultz reports a 98% hatch from Georgetown.

Bettors is getting a fine start on his property in Topsfield.

Rowe has been fortunate in being able to purchase two-months-old chix for 20c each.

Tenney is having wonderful success with his first brood.

Maloney is employed on the Poor Farm and manages to keep busy.

Holstrom has 500 chix and also a job.

Mercier has his hands full with three broods of chix and a garden.

Hall is combining chix and pansies in Merrimac. He will be all right if he can only keep his chix out of the pansy bed.

The Smiths (Alfred and Thomas) have joined forces and will supply Marblehead with chickens and tomatoes this summer.

Martin is manager of a large chicken farm in Middleton.

Bradley, McLaughlin, and Coulman are all in the landscape garden business in Gloucester. Let us hope that they will be able to make Gloucester even more beautiful.

Duncan has taken a gardening position in New Jersey.

Snow reports much work digging wells, pulling stumps, and growing chickens in Medway.

Langlitz from last reports was still shoveling snow in Snowville, N. H.

ESSEX FARMER^A_ND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 4

HATHORNE, MASS., JULY, 1923

No. 4

GRADUATES SUCCEEDING IN AGRICULTURE

Alumni Directory Shows Large Majority Engaged in Agricultural Pursuits

The first agricultural class from Essex Aggie was graduated in 1916. Since then seven classes have been graduated. Seventy-eight percent of these graduates are now engaged in some form of agricultural work. The class of 1920 is 100% agricultural, all of its graduates being actively engaged in the work for which they were trained. Of the sixteen young men who graduated last November, all are doing agricultural work except one. These figures are gratifying in view of the fact that although this school is not of college grade, and that it deals with boys hardly old enough to determine finally upon a life work, yet we can point with pride to the very large majority of our graduates who are following their chosen field and who are making good. Many of our non-graduates are also making noteworthy progress in various branches of agriculture.

Melville S. Grey, 1917, is listed in the Alumni Directory as a farm owner and manager. While a student at this school he was employed as contractor caring for several Beverly estates. After the armistice Mr. Grey remained overseas serving as an agricultural instructor. Upon his release from service he purchased the Coant Farm in Wenham which he has operated successfully for several years. Mr. Grey specializes in asparagus, berries and early vegetables. His farm is planted so completely with fruit trees that we wonder where he is to burn the prunings. Much of the farm produce finds a ready sale at his roadside stand while the remainder is sold retail and wholesale in Beverly. Mr. Grey is a member of the Advisory Board of the School.

Harold Stevens, 1918, worked with his father carrying on very successful projects in the garden of Devcreux Mansion, Marblehead. After his war service, and experience in the army of occupation in Poland, he entered the employ of Dr. Hardy Phippen, having charge of Dr. Phippen's estate in Salem. During the last two years, Mr. Stevens has been very act-

ive in the community and playground gardens in Salem. Early this spring the Trustees of the Ropes Memorial, Salem, appointed him as gardener. A visit to these grounds and gardens now fast approaching the peak of greatest beauty, will satisfy anyone of the wisdom of the above appointment.

Ernest A. Howard, 1918, is now agricultural supervisor in Haverhill, being employed by the School Department of that city. While Mr. Howard was a student at Essex, his projects were large and quite successful, in cluding both ownership enterprizes and the care of gardens and grounds for other people. He secured employment as local agricultural leader for Methuen and later was appointed County Club Leader for Essex County with headquarters at the School. He resigned this position to engage in Boys' and Girls' Club Work in Cumberland County, New Jersey. For the past three years he has been Agricultural Supervisor in Haverhill, where he has charge of boys' and girls' club work and is also supervisor of adult gardens. He also conducts agricultural classes in the high and continuation schools of the city and finds time to render assistance to those needing help in the care of gardens, grounds and poultry. In addition to his other activities, he devotes much time to the Essex Aggie Alumni Association of which he is president.

Philip F. Peabody, 1922, entered this School in the fall of 1919. He

Coming!

4 BIG FARMER EVENTS

July 18—Essex County Poultry Convention and Tour.
Essex County Agricultural School—Hathorne
10 a. m.

July 24-27—Farmers' Week at Massachusetts Agricultural College, Amherst.

Aug. 8—Auto tour to Vegetable Growers' Field Day at Experiment Station, Lexington. Leave Agricultural School, Hathorne at 9 a. m.

Boston Market Gardeners' Association will also hold their summer Field Day and Outing at the school. See press notices.

Your city cousin takes a vacation. Why don't you? These events come only once a year. You cannot afford to miss them.

was admitted to advanced standing and by close application to both study and project he was graduated with high rank last November. The first position he obtained after leaving school, was at the Donibristle Farm in Topsfield, where he was successful. He then secured a position as agent for a cow test association at Allenan County, Michigan, having received the appointment only after winning a competitive examination. Mr. Peabody has been so successful in cow test work that the State Director has requested the School to recommend several other men for similar positions.

Gilbert E. Tucker, 1919 was a Beverly boy. While yet a student at Essex Aggie, he served as garden supervisor at Methuen. After graduating from this School, he entered the Connecticut Agricultural College, Storrs, Conn. completing the required four years' course in greatly reduced time, receiving his diploma in June 1923. During this same month he purchased the Ordway Farm in West Newbury. This farm, consisting of 100 acres of fine fertile well diversified land, extends for over one half mile along the south bank of the Merrimac River. Mr. Tucker married Miss Evelyn Bodge, class of 1918, homemaking department in June. While at Essex, Mr. Tucker took a live interest in all school activities and in his senior year won the Bauer prize.

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

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Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

- July 18—Poultry Convention and Tour at the School. All day program commencing at 10 A.M. Start of tour 1 P.M.
- July 24-27—Farmers' Week at the Massachusetts Agricultural College, Amherst.
- Field Day—Boston Market Gardeners Association at School. Date to be announced.
- August 8—Vegetable Growers' Field Day at the Experiment Station, Lexington.
- August 11—Annual Field Day for Boys and Girls Club Members and all other Juniors at Hathorne.
- August 15—Chebacco Pomona Grange Field Day at Hathorne. All day program of sports, music and entertainment.
- September 4—Opening date for Home-making Department.
- September 4—Agricultural Department opens for new students.
- October 1—Classroom work begins for upper classes in Agricultural Department.

EDITORIALS

A reference to the above calendar will demonstrate that the School is becoming each year more and more of a center for the use of farmers, their friends and any group of citizens interested in allied lines. The Annual Farmers Day in March has come to be a real event in County life, often furnishing valuable help and instruction to over a thousand guests. It is the purpose of the management to make this School an ever increasing factor in the progress and welfare of our citizens.

Usually in the summer months the great mass of our population take a

vacation. Further, all trades, occupations and classes have their conventions, conferences, outings and picnics. As a class, our farmers do not allow themselves sufficient time for these things. Their responsibility for food production and the handling and care of animals and crops seem to restrict them from suitable vacations. We would like to appeal strongly for more recreation and change from the routine. Why not plan to attend some of the fine agricultural outings and field days which are now fully outlined. With the auto and modern means of conveyance, time and distance are greatly reduced. A plan to include the other members of the family and a few neighbors and friends will add to the pleasure and profit of all.

INSTRUCTIONS FOR CONTROL OF SOOTY BLOTCH

Sooty blotch is a fungus disease attacking both the fruit and leaves of the apple and pear. The growth of the fruit is not checked but it produces a blemish which lowers the market value of the fruit.

The appearance of the disease is quite completely described by the name (sooty blotch). The blotches, which are irregular, at first pale in color and later changing to a sooty brown or black are usually abundant in August and September and continue growth after the fruit goes to storage.

The control is simple. The good early season methods of plowing down old fallen leaves and disease fruit of previous year, together with the early sprayings, all tend to hold it in check. The best control however, is thru careful conscientious spraying in July and August, trying to anticipate and precede rainy or warm damp or foggy weather. The recommended sprays are lime sulphur, using one gallon of liquid form to 50 gallon of water, or if the dry form is used follow printed instructions. A spray of bordeaux mixture, the 4-4-50 formulae is very efficacious. Arsenate of lead at usual strength may be added if fall web worm, brown tail moth caterpillar or any other leaf eating insects are a problem.

DATES TO REMEMBER

- July 18th—Poultry tour beginning at 10 A.M. Agricultural School, Hathorne.
- July 24th—27th inclusive, Farmers' Week, Massachusetts Agricultural College, Amherst.
- Aug. 8th—Market Garden Field Day, Lexington.

SUMMER CARE OF ORNAMENTALS

Most of our hardy shrubs have completed their first growth. They have in most cases finished flowering and should be pruned. They require no special pruning, but should be allowed to take their own natural form. A portion of the older, heavier wood should be removed at the ground level. This encourages a vigorous new growth to spring up which keeps the shrub strong and vigorous.

Hedges should be sheared into form at this time which will probably be the second pruning of the season. The beauty of a hedge lies in its thickness of growth and shearing at least three times during the growing season encourages this quality.

Insect pests should be watched for and controlled. Aphid, rose chafer, tarnished plant bug are probably three of the worst enemies and should be controlled by spraying.

If you have problems connected with your flowers, plants, shrubs, trees or grounds, communicate with us. We may be able to help you.

BREEDING COCKERELS FOR SALE BY POULTRY DEPT.

The Poultry Department of the Essex County Agricultural School will have for sale, for delivery about Sept. 1st a number of fine Barred Plymouth Rock and Rhode Island Red (S.C) cockerels. The former are strong, vigorous birds from stock secured from the State of Maine. The Rhode Island Reds are from the famous strain of pedigreed 200-egg layers developed at the Massachusetts Agricultural College. The story of this work is well known to all.

These cockerels are offered to Essex County poultrymen in the hopes that the school may serve its poultry keepers by making this stock available. The birds will be sold for a nominal price and those interested are urged to place their orders early.

The public is cordially invited at all times to look over our plant. Many changes and improvements in the plant and equipment are now being instituted.

FIELD DAY OF CHEBACCO POMONA GRANGE

Wednesday, Aug. 15th at Hathorne

Every Grange member and family in Essex County should plan to visit the School on Wednesday, August 15. This is the date for the Annual Grange Field Day and arrangements are being made for the entertainment of a large number of Grangers. Remember the date, August 15th, and plan to come to Hathorne for a real Grange Outing.

NOTED BREEDER OF AYRSHIRES MAKES GENEROUS OFFER TO ESSEX COUNTY FARMERS

Should Make Dairymen More Efficient Producers

Competition in all branches of agriculture is so keen at present that only the efficient farms can hope to keep on producing. The farmer who has been producing at a loss must do one of two things—he must reorganize his farm so as to produce economically in order to meet competition production costs, and this means doing a little book work.

Practically the only way to reduce the cost of producing milk is to increase the average production of the breed, and the only way to do this is by using pure breed sires from high producing families. While the question of using pure breed stock has been emphasized again and again, there are still some farmers who are using scrub bulls that should have been consigned to the butcher long ago. And this is so in spite of the fact that there are splendid opportunities to improve the herd by the use of good stock.

A few days ago, the county agent received the following letter from Mr. Isaac R. Thomas, Proprietor of the Monstone Farm, Ipswich:

"You can do a great and good work in Essex County if you can persuade a lot of these farmers to destroy their scrub bulls and use pure breed bulls instead. I have tried to do this but have only had a partial success—so small it is not worth talking about.

"I have offered to give a pure breed bull calf to farmers who will raise it and give me their scrub bull (to send to the butcher) when the pure breed bull calf is old enough for service. I should think they would jump at a chance like this to double their milk production but they don't. They either don't care to improve their stock or else think I am trying to 'put something over.'

"If you can get their point of view, I would be glad to know it."

There is no question in my mind as to the need of better herd bulls. neither is there any question about the poor results secured by using scrub bulls. Just why farmers will use scrubs when good pure breeds are available has always been a conundrum to me.

We will all agree that the offer made by Mr. Thomas is a liberal one, especially so when we consider the fine herd he maintains. Would it not be a good idea to look into this matter immediately and take steps at once to

increase the milk production of your herd. If you are not in need of a good Ayrshire bull calf, perhaps you know a neighbor or friend who could use one. A little good co-operation on your part would help us eliminate the scrub bull altogether from the farms of Essex County. If interested, write directly to Mr. I. R. Thomas, Ipswich, or to the County Agent, Hathorne.

POULTRY TOUR

To Be Conducted by County Agent
Wednesday, July 18th

Every poultryman in the county should reserve Wednesday, July 18th to take in the county poultry tour. It will be an all-day affair beginning at 10.00 A.M. when we will inspect the poultry plant at the Essex County Agricultural School, Hathorne. Poultrymen will be interested to see the new type of permanent brooder house, which is nearly completed, and the new laying house which is still in the process of construction.

At 11.00 A.M. we will meet in the Assembly hall for a short speaking program by Professor Wm. C. Monahan, Extension Poultry Specialist, and the county agent, who will lead a discussion as to the advisability of organizing a county poultry association. Be sure and be there for this meeting and express your opinion on the matter.

Following a basket lunch on the school grounds, we will get the automobiles in line and start for the Jones' Poultry Farm, Georgetown, where we will have an opportunity to look the plant over under the guidance of Mr. Dodge, the poultryman.

From here we go to West Boxford to call at the Tryon Farm, where Mr. Freese, the manager, will take us around and tell the story about the farm.

The last stop will be at the Pine Grove Hatchery, Ballardvale, where Mr. Ernest Anderson, the proprietor, will conduct us about and explain things of interest.

Only three stops will be made so there will be plenty of time to see everything of importance without hurrying, which is a common fault with most tours.

Keep the date in mind, get your car tuned up and bring your friends along. Don't forget your lunch, as it will come in handy about noon time. Each plant has been selected because of some important object lesson it offers in the way of poultry management. This tour is being conducted for your benefit. Don't miss it.

VEGETABLE GROWERS' ANNUAL FIELD DAY—LEXINGTON AUGUST 8, 1923

County Agent Plans Tour

It is expected that over a thousand vegetable growers will be at the Market Garden Field Station, Lexington, August 8th, to take in the valuable program prepared. No Essex County grower can overlook this opportunity to get the latest ideas on vegetable growing. Reserve the date and join the auto tour organized by the County Agent. We will leave the Agricultural School grounds at 9.00 A.M., so we can have a full day at the Field Station.

The demonstrations will cover (1) fertilizer mixing, (2) fertilization of cucumber blossoms for seed production, (3) spraying and dusting for disease control, (4) vegetable tying by machine. Besides these demonstrations, there will be exhibits of many varieties of vegetables, as well as valuable experiments and tests under way covering (1) asparagus growing, (2) effect of size of asparagus root on production, (3) carrot blight control, (4) greenhouse tomatoes and cucumbers, (5) manure economy, (6) seed production.

At 4 P.M. the annual summer meeting of vegetable growers will be held with a program of immediate interest to all Essex County Market Gardeners.

Perhaps one of the biggest features offered by a meeting of this kind is the opportunity afforded for exchanging of ideas with fellow gardeners and the personal contact with such men as Professor Thompson and Staff.

Don't forget the day. Put up your lunch and get in line.

FARMERS' WEEK

Plans are all set for one of the best Farmers' Week Programs ever held at the Massachusetts Agricultural College, Amherst. This year the dates are from July 24th to 27th. The special programs prepared are as follows:

Beekeepers' Day, Tuesday July 24.
Fruit Growers' Program, Tuesday and Wednesday, July 24, 25.

Poultry Convention, Wednesday, Friday, July 25, 27.

General Farm Program, Wednesday, Thursday, July 25, 26.

Vegetable Gardening Meeting, Friday, July 27.

Tobacco Growers' Meeting, Friday, July 27.

Homemakers' Sessions, Tuesday and Friday, July 24, 27 inc.

Boys' and Girls' Outing, Tuesday, Friday, July 24, 27 inc.

HOMEMAKING DEPARTMENT NOTES

Attendance Honor Roll, 1923

The question is often asked, "How can students of the Homemaking Department attend school daily from various points in the county." The following list of students who have not been absent from January 1st to June 27th is the answer:

Blanche Atherton, Lynn
Margaret Greenleaf, Lynn
Frances Martin, Swampscott
Evelyn Newhall, Lynn
Marion Keyes, Danvers

Of the above list, the first four students also have a perfect attendance record for the entire school year. These are indeed remarkable achievements when one considers the unusual amount of extremely stormy weather of the past winter.

Scholarship Honor Roll, 1923

The following list of students have attained an average of more than 85% for the entire school year. An examination of the figures will indicate how very keen has been the competition:

Hazel Eastman, Lynn	94.2
Gladys Hulsman, Lynn	92.1
Margaret Greenleaf, Lynn	91.4
Marjorie Livingston, Andover	91.3
Leslie Wagland, Methuen	91.1
Ruth Gay, Lynn	90.7
Marjorie Rowe, Lynn	90.6
Anne Sanford, Hathorne,	90.2
Doris Goodwin, Swampscott	89.2
Janet Dyer, Danvers	88.9
Rae Reid, Georgetown	88.8
Madeleine Walker, Beverly	88.5
Gertrude Smith, Methuen	88.2
Elizabeth Cronk, Marblehead	88.1
Blanche Atherton, Lynn	87.6
Rosa Hill, Marblehead	87.6
Florence Mason, Marblehead	87.6
Elsie Livingston, Andover	87.3
Elizabeth Wagland, Methuen	87

FARMERS' WEEK PROGRAM FOR HOME MAKERS

An elaborate program has been prepared for the Home Makers' section of the Farmers' Week Program. This session commences Tuesday, July 24th at 9.30 A.M. with community singing and is followed by lectures by Mrs. Evelyn Adams, Chairman Home Economics Committee, State Grange; President Butterfield; Professor C. L. Thayer and Miss Amy C. L. Thayer, University of Minnesota. At 8.00 P.M., Miss Sarah Arnold will give a talk on "The Home—The Center of Community Life."

HOW YOU CAN HELP

If you know of any boy, fourteen years of age, or over, who would like to secure a good practical agricultural education you will do him a favor by getting in touch with this School. Telephone Danvers 230 giving the boy's name and address and an instructor will be glad to pay him a visit.

SCHOOL NOTES

Charles O'Keefe, 1924, enjoyed the recent holiday with his parents. O'Keefe has a project at Wildacres Farm, East Greenwich, Rhode Island.

John Sullivan of Salem, class of 1925, is employed on the same estate.

Andrew Coukos of Lynn is now employed in the dairy division of the School.

Richard Ashton of Savoy Road, Salem, has a small animal project on the Williams Farm, Peterboro, New Hampshire.

Mr. R. L. Smith, Agricultural Instructor in charge of Federal Students at the School, is attending the summer session of the Massachusetts Agricultural College at Amherst.

Mr. H. P. Thurlow, instructor in dairying, is also attending the summer session.

Mr. R. H. Denman of the Faculty has recently returned from Ithaca, New York. Mr. Denman has just received the degree, Master of Science, from Cornell University.

The Vegetable Growers' Annual Field Day will be held at Lexington, August 8th. Plans are now being made to transport students who would like to visit the Experiment Station on this date. Students who are interested, should communicate with Project Instructor or with Mr. Page at the School. The meeting should be especially interesting to all students having vegetable or general farm projects.

Students Dill, Livermore and Howe are working on the Tryon Farm, Boxford.

Bauer Prize candidates have already been nominated by the various agricultural instructors. There were twenty-six in the first list and a committee of the Staff is now working to reduce this list. A committee, appointed by the Trustees, will soon make a visit to the final list for the purpose of determining the winners.

ESSEX COUNTY POULTRYMEN GO TO NEW HAMPSHIRE

About fifty Essex County poultry enthusiasts went to New Hampshire, June 28th to attend the two-day Poultry Extension School, held at the State College, Durham. Professors Halpin of Wisconsin and Phillips of Indiana were on the program and both gave valuable points in various phases of the poultry industry.

METHUEN BOY IS POULTRY CHAMPION

John Clarke Makes the Goal After Four Years' Work

The Boys' and Girls' Poultry contest in Methuen has been a splendid success this year. John Clarke, a member of the West School Poultry Club, had been in poultry work for three years and this year he showed such interest and ability that last fall the home poultry plant was turned over to him.

He started with 57 White Plymouth Rock pullets and hens. The birds were comfortably housed and John followed the best practices in feeding and caring for them. The egg production was very good and during the whole contest 4,766 eggs were laid. A careful record of expenses was kept and the enterprise showed a final profit of \$136.00.

E. H. Nodine, State Poultry Leader, after considering this record and John's interest and four-year membership in the Poultry Club, decided that he deserved the County Championship. As a reward he will receive a trip to the Massachusetts Agricultural College, which includes a stay of five days at Camp Gilbert on the campus with trips, sports, and other things of interest.

The boy and girl contestants in Methuen have made an enviable record. Last season there were two County champions and this year's championship is indicative of the continued interest of the young people and the co-operation of the parents and the school authorities.

A NOTABLE PROJECT

Frederick Kezer is a good example of what Essex County boys on poultry projects can do when emergencies arise. Kezer is at the Applecrest Farm, Hampton Falls, New Hampshire, where he has successfully raised over 7,000 chicks. Kezer had been at work only two weeks when the poultryman was taken sick and was in bed for three weeks. During this time he cared for 22 brooder stoves and successfully brooded this large number of chicks and brought them through with less than 10 per cent mortality.

They are raising principally Rhode Island Reds. On the way to the Poultry Conference at New Hampshire State last week, the several machines with about 50 people stopped at Applecrest Farm and saw Kezer at work on the poultry plant. They have nearly 4,000 handsome pullets to show for his accomplishment on the poultry project for this season.

ESSEX FARMER^{A_ND} HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 4

HATHORNE, MASS., SEPT., 1923

No. 5

APPLE CROP IN ESSEX COUNTY

A Valuable Crop soon to be Harvested

Essex County is again fortunate in having the promise of an excellent crop of winter apples. This is the largest one for at least five years. It is safe to estimate that a crop of 300,000 bushels is in sight.

The immediate problem at hand is the proper harvesting and housing of this valuable crop. When it is learned that many other sections of Massachusetts, several states in New England, (notably Maine) and also the great apple belt of eastern New York, have a very meagre and light crop, the importance of our crop can be immediately realized. During the past few years, because of the shortage of labor and for several other apparent reasons, the crop has not been properly harvested and handled. The greatest saving of the year may perhaps be accomplished if the grower will use all of his ability and resourcefulness in harvesting this crop in the most careful manner. It is perhaps unnecessary to urge the assembling of the most careful equipment in the form of light, strong fruit ladders, convenient well-lined, light picking-baskets, convenient reasonable-sized containers for transferring the fruit from the field to the storage, the use of spring wagons, and above all, careful men to handle the fruit at every stage of this transfer. It is much better to keep the fruit put up in packages rather than to pour back into bins in storage. Every effort should be made to chill this fruit as rapidly as possible after it has been taken into storage. This is accomplished by a careful attention to ventilation during cool nights and the closing of storage during sunny days. Fruit ordinarily keeps much better either in underground or carefully insulated storage.

The marketing of our apple crop is a special and interesting study. Little



IT PAYS TO RAISE PURE-BREDS

effort should be made to put winter varieties immediately upon the market. Such a movement, which brings these apples in any way in competition with fall varieties (and there are several admirable fall varieties, notably Wealthy, McIntosh, and local sorts) and especially when there is a large offering of windfalls and miscellaneous varieties, is liable to result in causing a depressed market far into the winter season.

In the matter of packages, fruit farmers of this country are very fortunate. No particular attention need be given to the barrel package unless one intends to be a shipper to Western markets or foreign markets, both of which are probably going to be excellent this year. For nearby markets, the buyers are prepared to use the standard fruit bushel. This is an open package, or it may be loosely closed with a superstructure of slats. It is a package which allows of easy handling and excellent display of the fruit and lends itself to all of the needs of grading and storage. Furthermore, it is a relatively inexpensive package and in many cases even though a new package is used, and

GETTING YOUNG STOCK ONTO WINTER RATIONS

The other day a man made this statement, "I have been so busy that I haven't been down to the pasture for over a month." As "confession is good for the soul," I wonder if during the busy season we have not neglected the pasture. It is true that pastures in this county, due to the dry season, are not in a good condition.

If the pasture is too far away, wouldn't it be a good thing to bring the calves nearby, so that you could give them green corn, grass, or millet. Green succulent feed is a cheap and satisfactory feed. As the fall comes on and your supply of green feed drops off, start feeding silage slowly at first. After a week or two feed as much as they will eat up in a reasonable time.

As for a grain winter ration, Mr. C. H. Eckles, University of Missouri, suggests a very good and practical one. "Two or three pounds of 'grain' feed with this ration. Another mixture a protein feed such as gluten feed, linseed or cottonseed meal; the other half to be corn, oats, bran, or any other mixture, if cheaper per pound than corn." Ordinary English hay is fed with this ration. Another mixture would be 100 lb. bran, 100 lb. corn meal, 100 lb. ground oats, 25 lb. to 50 lb. oil meal. Oil meal should not be fed in too great quantities, as it has a tendency to scour.

Remember this is your winter ration. You must lead up slowly to it. Give green feed and pasture until the feed fails, then start in with the ensilage and grain. In this way you will keep bills down and at the same time keep the heifers developing.

(Continued on Page 7)

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the
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CALENDAR

- Sept. 4—New students admitted to Agricultural Department.
Sept. 4—Homemaking Department open for all classes.
Sept. 12-15—Greater Lynn Fair.
Sept. 19-22—Essex Agricultural Society Fair at Topsfield.
Oct. 1—Class instruction begins for upper-class agricultural students.
Nov. 3-10—Eastern Apple Exposition, Grand Central Palace, New York City.
Nov. 27—Graduation Exercises, Class of 1923.

EDITORIALS

NEW CLASS

Again the School is in session. A new class, numbering nearly one hundred, has been admitted and is now hard at work with studies and projects. Every one will be interested in the progress and success of this promising class. The new students are to be congratulated upon the opportunity which is extended to them by the citizens of Essex County. Perhaps on the other side, the citizens should be pleased to note that so many young women and young men are looking forward to a career in these two very practical lines, Agriculture and the Home Making studies.

GRADUATES

Several times we have been very forcefully reminded of the positions which our graduates are taking. Once during the summer we had an opportunity of showing officials of the Department of Education a little of the work of our graduates who have now become land-owning farmers. With the passing of some of the ablest men who have made the agriculture of the county what it is, it is very reassuring

to know that their places and even their farms are being rapidly taken by whole-hearted young men who are ambitious and loyal to their chosen work and who, we think, will make worthy successors to the splendid farmers who have made this county so prominent in agriculture.

It is also interesting to note the places which our graduates are filling in the membership and also in the official capacities of so many of our agricultural and horticultural organizations.

FRUIT SHOW

Essex County, along with other sections of Massachusetts, has been engaged in extensive planting of new fruit orchards. Some progress has been made in the better cultivation, pruning, spraying, and general care of the older orchards. This year Essex County has a larger crop of fruit than during the several years immediately preceding. This is very timely when we consider the great effort which is to be made, looking toward the popularization of the use of nearly or home-grown fruits. On November 3rd to 10th the ten northeastern states will make a big educational and commercial display in Grand Central Palace, New York City. Essex County, which grows so many varieties in such a creditable manner, as for example, Baldwin, MacIntosh Red, Wealthy, Gravenstein and Roxbury Russet, should make a great effort to exhibit at this exposition and do everything in their power to increase the popularity and forward the use of eastern-grown apples. The orchards of this county are destined during the next score of years to bring a vast amount of wealth into this section. This result should be welcomed by every class of citizen.

SCHOOL NOTES

Mr. C. A. Holt of 9 Bickford St., Beverly, was in charge of the Flower Exhibit at the Sam-Sam, August 18th. Mr. Holt was a member of the first class at Essex Aggie.

Fred Morris, class of 1922, visited the School recently. Morris has worked on the Crane Estate in Ipswich for several seasons. Since graduating he has been employed as poultryman on the estate.

Hugh Parkhurst, class of 1923, of Gloucester, was at the School finishing up work in preparation for college. Hugh is expecting to enroll at the Connecticut Agricultural College at Storrs, Conn. Another Essex boy who expects to enter Connecticut Aggie this fall is Gardner Caverly of Ipswich, class of 1922.

ATHLETIC ASSOCIATION FINANCES AT LOW EBB

Immediate Payment of Dues Requested

With the return of the students to School, interest in athletics revives. Football holds the center of the stage until after Thanksgiving. Then we eagerly wait for the first basket-ball game. For out-of-door sports we enjoy hockey in the winter months and then track events in the spring.

What a disappointment to us all if "Essex Aggie" were obliged to drop these sports, because of being unable to finance them properly. Usually school authorities furnish the place to play and employ an instructor. It is left with the Athletic Association to pay for the equipment, transportation of players, referees' fees and various other incidentals. This amounts to considerable during the year and in most schools this expense is met by the students themselves.

It has long been the practice at "Essex Aggie" to urge its students to become members in the Athletic Association. The dues are now \$1.50 per year and every student new or old should hand this amount (or more if you can) to your project instructor. You will receive in return a membership card which entitles you to all the privileges of the Association. Let us sign you up in the big E. A. A. S. Book.

NEW BOOKS ADDED TO OUR LIBRARY

The new books recently added to our library cover a wide range of subjects. Most of the books are agricultural but a few good fiction and teachers' professional books have been acquired.

Fiction:—"The Man For the Ages" by Irving Bacheller. "Vandemark's Folly" by Herbert Quick.

Teacher's Professional Reading:—"The Ideal Teacher" by George Palmer; "Supervised Study in English" by McGregor; "Supervised Study in Mathematics & Science" by Sumner; "Education for the Needs of Life" by Edgar Miller; "How to Study" by McMurry; "A Brief Course in the Teaching Process" by Strayer; "Story-Telling, Questioning, and Studying" by Horne; "Educational Measurements" by Starch.

'Agriculture:—"Dairy Farming Projects" by C. E. Ladd; "Market Milk" by Kelley and Clements; "Insecticides and Fungicides" by Anderson and Roth; "Productive Vegetable Growing" by John W. Lloyd; "Automotive Repairs" (2 volumes) by J. C. Wright; "Popular Poultry Pointers" by Ralston Hannas.

EXTENSION SERVICE

ARE TOO MANY PEOPLE GOING INTO THE POULTRY GAME?

Every now and then some one will make the remark that too many Massachusetts people are going into the poultry game and pretty soon prices will be down as a result. Perhaps these poultrymen would be interested to know a few facts regarding poultry produce shipments to Boston for the year 1922.

POULTRY

State	Pounds
Illinois	19,618,029
Indiana	5,938,841
Iowa	4,421,799
Ohio	1,708,216
New York	1,454,453
Kansas	1,454,439
Minnesota	1,076,139
Oklahoma	1,253,065
Massachusetts	412,916
Total	37,337,897

(Massachusetts shipped 1.1% of the poultry supply to Boston during 1922)

CASES OF EGGS

State	No. Cases
Illinois	709,510
Indiana	320,303
Iowa	141,971
Ohio	108,429
Minnesota	108,031
Missouri	99,680
Maine	98,734
Kansas	83,347
Massachusetts	24,039
Total	1,694,044

(Massachusetts supplied 1.4% of the eggs shipped into Boston during 1922)

Do you still think we need to worry about our poultry market?

FALL FAIRS

It is now the season of fall fairs and the chances are 10 to 1 that you as a poultryman have never considered the event as a valuable means to advertise your farm and your product. By neglecting to prepare an exhibit are you not losing a valuable opportunity to increase your business? Think of the thousands of people these fairs reach! What an opportunity to let the world know where you live, and what you have to sell! Do you realize that business concerns are not only eager to exhibit their product, but are willing to pay big money for the privilege? And, why? Simply because no better place can be

secured in which to advertise ones goods and to do business one must ADVERTISE.

Think this over Mr. Poultryman. The County Fairs will have a fine poultry show this year, and have the use of a new building for housing the show. The time is ripe for booking up orders for stock, hatching eggs, etc. Do as our tradesmen do. Make an exhibit worthy of your name, advertise, and be on hand like a salesman to book orders. Such a procedure, methodically followed, would take the chance out of marketing our produce, which reminds me of an article printed in the "Potato Grower" a short time ago.

"The Farmer—
Plows in hope,
Lives in faith, and
Markets by accident."

How much longer will he market thus?

APPLE SCAB CONTROLLED

While apple scab is considered a serious trouble to the orchardist, it is entirely possible to consider it a blessing in disguise, especially if one is endowed with an optimistical turn of mind, for the reason that only the grower who takes the pains to spray thoroughly will have a high-grade quality of fruit to sell.

Mr. R. N. C. Barnes of Andover was seriously troubled with apple scab last year, and being a man who wants to do things right, if done at all, he agreed to follow a spray schedule as outlined by the County Agent, and by so doing carry on a demonstration to control apple scab.

The County Agent made several calls during the spraying season to observe the thoroughness with which the spray was applied. The fact that it was well applied, and that apple scab can be controlled is testified in Mr. Barnes' statement to the County Agent.

He reports in a letter dated August 4th: "My apples were all thinned immediately after your last visit. They appear to be almost 100% perfect so far." It should be noted, too, that Mr. Barnes not only sprayed, but thinned his fruit as suggested. Anyone else troubled with scab can do the same kind of control work by applying the same kind of treatment. If you have inferior fruit this year, start now to remedy matters for 1924. The County Agent will be glad to assist you.

APPLY MANUFACTURERS' BUSINESS METHODS TO AGRICULTURE. WHY NOT?

1. Keep books.
2. Summarize your results.
3. Know your cost of production.
4. Compare that cost of production with your neighbor's cost, or the market price. Can it be reduced?
5. How about your labor units?
6. Are three men working on a small job that one man could and should handle?
7. How about quality? Do customers complain or do they come back?
8. Is your labor income in keeping with your investment?
9. Would it be possible to concentrate your efforts on a few crops rather than many?
10. How about your volume of business? A big volume of business may insure greater success as it decreases cost of production.
11. Attend meetings and conventions. Remember the live ones are at such places, the back numbers stay home.

OLD HENS VS. PULLETS

That the number of pullets kept in proportion to old hens has an important bearing on the average labor returns per bird is strikingly shown by a glance at the table below prepared by the University of Maine as a result of a study of 183 poultry account books:

	No.	Av. labor
Group (flocks with) flocks prod. turns	egg re-	
Less than 35% pullets	10	99 2.77
35% to 74% pullets	99	118 2.97
75% pullets or over	72	134 3.48

It will be seen that the third group which is comprised of over 75% pullets made a gain on labor income per bird of \$.71 over group one, where old hens predominated. These figures were obtained from the poultrymen themselves. No stronger argument need be offered for getting rid of a large number of our old hens and give the space to pullets. The best time to cull is now. Hens that are laying now, that have well bleached shanks, and ruffled feathers are and have been your best producers. These can be saved for breeding purposes, but all the non-layers, or perhaps a better terms would be poor layers, should be disposed of before they eat away any more profits.

SOME INTERESTING FACTS ABOUT OUR NEW POULTRY PLANT AND BIRDS

The new poultry plant, situated to the south of the Homemaking Building, is attracting considerable attention at the present time. The permanent brooder house, 50 feet long and 12 feet wide, built to accommodate seven to eight hundred chicks at a time brooded under two brooder stoves, is already for use, early next spring. One end of this house has a grain room with running water. This will be a big convenience and a labor saver.

The new laying house, 72 feet long and 24 feet wide, is completed and there are 440 pullets housed in it, at the present time. These pullets represent the result of our purchase of 1000 day-old chicks on the fourth of March last. The broilers from this particular lot were all sold at the age of nine and ten weeks. The pullets in this laying house are all in laying condition. They laid their first egg at four months and twelve days and for the last three weeks have averaged 40 per cent egg production, one pen of 150 birds averaging over 50% at this time.

Much credit for the fine growth and general appearance of these birds must be given to the two students working on the poultry plant this summer who have had the responsibility of the care of these birds, James Curran of Danvers and Irving Nichols of Gloucester.

In addition to the pullets in the laying house, we have approximately 150 White Leghorn pullets, 100 Barred Rock pullets and 125 Rhode Island Red pullets, raised from a lot of chicks that came from Amherst College. This particular lot of pullets will be used for our breeding purposes here at the School next spring. The parents of these birds at Amherst have a flock average of over 200 eggs per bird for last year, and we expect to use some pedigreed male birds and hope to build up a fine laying strain of our own here at the School. All of the male birds from the Barred Rock and Amherst Reds have been kept and part of them are for sale at \$4.50 each to poultry men or persons wishing to get good breeding stock. They may be seen at any time on range behind the Homemaking building.

There are one or two features embodied in the laying house that have attracted considerable favorable attention from outside poultrymen. The first is the arrangement of the roosts and dropping boards so that they are raised every morning and fastened to the rafters, thereby providing more light and circulation of air on the floor for the birds during the day and

at the same time depriving them of a chance to do any roosting during the day time. The nests are of a new type fastened to each side wall and are the enclosed type with a wire bottom, which greatly relieves the trouble of excessive heat during the summer. They are very easy to keep clean and sanitary. We have a new style feed hopper for the dry mash which is working out very satisfactorily. The small windows at the rear of the coop have provided fine circulation of air during the warm weather, and the actual temperature inside of the coop has been no greater than the outside temperature.

The mechanics department is at work making a blue print of this building and we have the cost of the material used at hand, and the same will be gladly furnished to persons interested.

JUNIOR FIELD DAY AT AGGIE

Youngsters From All Over County
Have Happy Day

Essex Aggie played host to the 4-H club members of Essex County, on Saturday, August 11th. It was an all-day affair starting with practical contests in the morning and ending with a lively baseball game before sundown. The morning contests ran along the lines of club activities. There was Canning Judging, Bread Judging, Seed Identification, Stock Judging and Poultry Judging. The School truck took the visitors down to the 10-acre garden on which the Aggie boys are working and the various other departments were inspected.

Everyone had a lunch under the trees near the school and after a half-hour's rest, the sports started and all kept busy the rest of the day. Here are the results of the contests.

Seed Identification:

- 1st—John Ray, West Newbury.
- 2nd—Ned Moore, West Peabody.
- Arthur Moore, W. Peabody.
- 3rd—Dana Rowe, Haverhill.

Poultry Judging:

- 1st—Francis Eldridge, Georgetown.
- 2nd—Ira Eldridge, Georgetown.
- 3rd—Earle Foster, No. Andover.

Stock Judging:

- 1st—Earle Foster, No. Andover.
- 2nd—Harold Rogers, Ward Hill.
- 3rd—Geo. Bodenchatz, Hathorne.

Canning Judging:

- 1st—Gertrude Jane, Beverly.
- 2nd—Evelyn Sayers, Haverhill.
- 3rd—Muriel Surret, Haverhill.

Bread Judging:

- 1st—Gwendolyn Cassidy, Haverhill.
- 2nd—Luella Stone, Haverhill.
- 3rd—Madeline Walker, Beverly.

EDUCATIONAL EXHIBITS AT FALL FAIRS

Five Departments of Agricultural
School to Contribute

With the coming of the Fall Fairs, the usual requests are made by the various Executive Committees of Fairs that an exhibit be made from the Agricultural School. Inasmuch as these exhibits offer many possibilities in the way of getting across new ideas to people not connected with the School, the Extension Service naturally assumes charge of the exhibits. For this reason, practically the entire time of the Extension Agents will be given during the first three weeks of September in preparing for and attending the two leading County Fairs, namely, the Greater Lynn Fair, scheduled for September 12th to 15th, and the Essex Agricultural Society Fair, scheduled for September 19th to 22nd inclusive.

The agricultural exhibit always aims to point out some vital factor for the farmer to look to in order to increase his labor income. Heretofore all the emphasis has been placed on the production end of farming, but it seems that the time is now at hand when more attention should be given to marketing farm products, as the farmer falls down on marketing a great deal more than on production.

The agricultural exhibit will aim to point out the weak spots in the marketing by several demonstrations and exhibits. The keynote to all exhibits will be "quality" products and "standardization." Thousands of dollars are lost yearly by New England farmers merely because little or no attention has been given to marketing. Years ago quality of farm produce was not a very important consideration, but with our present shipping facilities it is apparent that our farm produce must meet competition from the West and South. Quality products coupled with standardization plays a very important part in securing a high-class trade, whether it be to the consumer, retailer, wholesaler, or jobber.

The departments to be represented are: Fruit, Poultry, Vegetable, Dairy and Homemaking. In all exhibits calling for a demonstration the students at school will do the work, thus the demonstration will be two-fold. It will not only show the proper way of preparing for market, but will show also how well the students can apply themselves to actual practice as a result of their study.

Director Roland H. Verbeck of the School of Agriculture, St. Lawrence University, Canton, N. Y., made a visit to this School recently.

WITH THE COUNTY CLUB AGENT

CLUB CHAMPIONS RETURN

4-H Club Winners from Essex County Enjoyed Camp Gilbert

Essex County was well represented at Camp Gilbert, the Club Champions' Camp, this summer. Eight of our 4-H Club members made the journey to the Massachusetts Agricultural College at Amherst as a reward for achievement in their particular line of work. Six of the eight from Essex County were County Champions. They had done the best work of any club members in our county in the project they had carried on. The other two were winners of the highest honor club work offers—state championship. One boy, Philip Dimlick of Andover, was the State Poultry Club Champion, while Kenneth Leighton, Haverhill, was State Pig Club Champion. The County Champions were Edith Starr, Beverly, Clothing Club; Bertha Greaney, Beverly, Canning Club; Marguerite Watson, Essex Falls, Food Club; Eunice Sellers, Andover, County Pig Club Champion; Robert Walker, Beverly, Handicraft Club; and Benjamin Ogden, Middleton, Garden Club.

The party left Danvers Square on Friday morning, the 20th, in three machines. The County Club Agent led the way through Lowell and Peperell. Lunch was enjoyed at noon just outside of Fitchburg. A wonderful spot was selected beside a mountain stream and everyone enjoyed a good lunch and rest. Two of the cars were financed by the Essex County Agricultural School and the third was furnished by Mr. Simmons of Haverhill who is very warm toward club work. After an hour's stop the cars took the road again and the party enjoyed the wonderful scenery along the Mohawk Trail. Finally Millers Falls was reached and there a short cut took the machines under the shadow of Mt. Toby, down the Connecticut Valley by Sunderland and finally the party arrived at the College at about 5 o'clock.

The week was spent both pleasantly and profitably. Fun was included in wholesale amounts in the order of things but a large part of each day was devoted to educational talks and trips. Food was furnished by the State as were the accommodations for rest. The food was served in Draper Hall and three times a day a hundred hungry champions, refreshed themselves with plenty of good wholesome food. The sleeping quarters were

fine. The girls occupied North College Dormitory while the boys slept on cots in the Drill Hall. Mosquitoes are almost unknown in Amherst, a fact which added to the general comfort.

The calibre of the boys and girls who make up Camp Gilbert is exceptional. Nowhere in the state could be found a group as large where such quality would be present. Director Willard made the statement after the campers had listened for a solid hour to a lengthy lecture on a complex subject, that the attentiveness and apparent understanding of the youngsters was wonderful. This is true, especially when one considers that campers vary in age from 12 to 19 years. The comment is characteristic



1923 Club Champions at M. A. C.

of the opinion gained by contact with Boys' and Girls' Champions as the writer is able to testify after spending a week among them.

Why is this true? There is only one reason, the boys and girls club work has the right idea. It teaches to "do by doing." Practical things are its only interest. The Champions are able to DO the BEST WORK as well as show intelligence as to subject matter. Schools tell the "why" but 4-H Club Work goes a step further and adds the "how." It is not a separate educational move and never can be. It merely supplements school work so far as the few interested young people in each school who accept its free membership are concerned.

Camp Gilbert is named after our Commissioner of Agriculture and is a wonderful aid to Club Work. It is a worthy reward which inspires every one of our 1500 Essex County Club members to do their best and try and attain the coveted championship trip. The inspiration received at Camp has, in many cases, converted our champions from individual members into enthusiastic local leaders who take on responsibility for several other members. The Essex County Agricultural School has always seen the good of

CLUB WORK AT THE FAIRS

Exhibits To Be Encouraged Among Club Members

The coming of several greater and lesser fairs about Essex County is looked forward to by 4-H Club members with a personal interest. With honors and ribbons and cash offered as premiums on the very articles they have been required to produce in their Club Work, they are watching the vegetables, calves and poultry and preparing these for the show and carefully packing jars of vegetables and fruit for the canning exhibits. Vegetable exhibits will be limited owing to the dry weather which has been experienced this summer. The poultry is doing well, however, and a large showing of various breeds by Club members is anticipated.

A new feature at Topsfield is the Calf Club show. As the Calf Club is in its infancy in our county, not many animals can be expected to be entered. The awards in this class will be based upon probable future production of the calves as milk producers. Both grades and pure breeds will compete in the same class.

The girls will have a chance to enter canned products, clothing and bread and good awards have been offered by the Essex County Agricultural Society for the best work. The State Department of Agriculture pays a large amount of the premium money on agricultural products. The Essex County Agricultural School chips in with the rest of these good folks who are trying to help along our boys and girls and provides transportation to help the worthy club members who could not otherwise send in their products, owing to distant location, etc.

Exhibits at local fairs are encouraged even in preference to the County Fair. Better and larger exhibits are shown and local advertising and interest are assured. Grange fairs are held in a few towns and these are sure to welcome junior exhibits.

The Camp and has taken special measures to provide comfortable transportation to and from Amherst. Interest in the next year's trip is already stirring and as the competition which brings out the winners progress, these columns will occasionally contain notes about the work.

WITH OUR BOYS ON PROJECT

INTERESTING THINGS 'AGGIE' BOYS ARE DOING

Gleanings From Weekly Reports

The following excerpts are taken from the weekly reports sent in by our students from their project this summer. It is by means of this system of reporting, together with the frequent and regular visits by project instructors, that the School keeps in such close touch with the boys all summer.

One of our boys who is carrying a poultry project writes: "I have been doing the daily chores. I kill and dress 25 to 30 lbs. of fowl each week. We are changing the poultry fences so as to get the birds on fresh grass. I am also helping the electrician who is wiring the poultry houses.—(Downing).

Another poultry boy sends in the story of what he is learning. "I have had the care and management of the plant, general chores, etc. I am getting good experience in judging the condition of a bird, whether it is fat or not. We tell by the meat on the breast. If the bird is fat and in good condition, the breast will be plump and rounding, but if in poor condition, the breast will be V-shaped" (Earley)

From a student who is doing dairy work (which he does not mention in this report) and helping in a large vegetable garden we get this: "I have been weeding and hauling vegetables to market. Shell beans, wax beans, and beets are gone. I am taking in corn, tomatoes, and a few boxes of beets now. The cauliflower have just started to head and yesterday I noticed that the aphids have started to work on them. I saved my cucumbers from bacteria wilt by spraying with Bordeaux. The dry weather made my corn dry up and I thought I had lost it but the last rain brought it back somewhat."—(Dwyer)

This boy is getting very fine experience on a large dairy farm in Topsfield: "Daily routine work about the livestock as reported before. Hauled three loads of oats and peas to stack and second crop of alfalfa to Dairy Barn. We did not wait for the third crop of alfalfa as is the common practice but followed the newer idea of cutting when it blossoms to insure the very best quality in the second crop, at the expense oftentimes of the third crop. Test cows now get maximum beet pulp Jane 6 lbs.; Duchess 5 lbs.; Matilda 5 lbs. Spread 1600 lbs. of lime on alfalfa piece and harrowed the

lime in well, to keep it from exposure to rain, with a cutaway harrow. Sent to M. A. C. for one-acre size bottle of Alfalfa Bacteria Culture. Mowed part of meadow at Pike's for bedding. I am changing Matilda from Fowler's Solution of Arsenate to "Kow Kare" for her skin trouble. I am feeding 20% dairy ration instead of 24% with hominy. One brood sow due in a week. We are drying Maude up to prepare her for testing. A piece of land, which was sown to sweet clover, 8 lbs., and alfalfa, 1 lb., contained about one-third of an acre. It was inoculated by two methods, bacteria culture on the seed and soil applied to the piece. Both of these were solely for the sweet clover, as the alfalfa was added as an experiment. On July 26 I found alfalfa in blossom and a good catch of alfalfa. No alfalfa inoculation was attempted, which leads me to believe that an inoculation for all legumes is practical."—(Holmes)

Floriculture project gives this boy good training in Private Estate work: "Began pruning shrubbery this week. This is not exactly pruning. It is taking the dead wood and some of the older wood out, leaving some and all the young, healthy shoots. The bushes were not pruned for about three years so they just grew naturally. Much wood was cut out of them. This is not the time to prune them. They should be pruned about February and after the flowering season is over. We are pruning forsythia, dogwoods, deutzias, hawthornes, hydrangeas, privets, barberries, and azaleas. Rain this week but did not get below the dust to do much good. Saw a honey locust tree in bloom. Bunches of reddish-brown berries about the size of a cherry are found. A wonderful sight."—(O'Keefe)

From one of the Federal students who is doing Ornamental Gardening work in New Jersey comes this report "I am working on the stone wall, helping set stone and also filling the joints with loam. Some of this filling is expected to wash out but enough will stay in for moss to grow and to plant flowers in later on. This wall is expected to take about 50,000 plants So far I have not found out what kind they are to be."—(Duncan)

One of the Seniors who is handling a Fruit project very satisfactorily writes: "The harvesting of turnips is getting to be considered by me as part of my chores, as we harvest every morning except Friday. I had the pleasure of bringing one of our horses from Bolton to Stow. It usually takes twenty to 30 minutes by machine but it took me only two

hours! We have picked all of our Williams apples and have begun to pick up Gravenstein drops. For the Williams in three grades we received \$1.50, \$1.00 and 75c respectively. Those were the average prices. Turnips are still selling for \$1.50. While dragging around the trees in our orchard set last spring, I noticed fire-blight and on closer examination found that it had just struck the Astrachan trees. Trees, from lack of water, have not as healthy an appearance as they might have. This applies to other crops as well. Had my first attempt at packing apples. Faced grades 1 and 2 but did not face No. 3's, which were small ones. I jumbled all the grades, however. There is quite a system of nailing the bottom on a box. It surely takes considerable practice to get it on right."—(Ewing)

The first-year boys have, for the most part, devoted themselves to vegetable gardens, usually at home. This is the story of one week's work: "We have started our fall plowing this week. We used three horses on an Oliver sulky plow. We have a spreader that will make the pulling come equal to all the horses. After plowing we hauled manure out in the field with two-horse dump carts, and then spread it with a Kemp manure spreader. We harrowed the piece and then brush-harrowed it to make it level. Then we sowed it down with timothy hay seed. We used a wheelbarrow seeder. We also picked Gravenstein apples from the small trees, as the wind was blowing them off. Next week we pick apples, continue the plowing, and work in the cider mill, as far as the plans go now. I take care of the two calves and four cows every night. The new horses are working finely, although they still have a little cold. We do not let them stand idle when warm or let them be in the least bit of a draught."—(Smith)

These specimen reports will give you a fairly representative idea of what the boys are doing and the stories they are turning in to the School. This year's project term is nearly over now and the boys will be coming back to classroom work, much richer in experience and practical application of the principles taught and ready to learn new principles to be applied on next year's projects.

Winslow Dunnells, 1923, of Andover, Mass., has a position in the William Wood Creamery at Shawshen Village Dunnells has reported his work faithfully and has an excellent project.

SUMMER SCIENCE

Observations, Questions and Comments

Are you attending the greatest school of the world, "The Out of Doors", or are you peacefully existing in it? There are things happening about you all the time that are of vital importance to you. If you are keeping your eyes open, you may see the signs which point towards important occurrences. The aim of the Summer Science is to guide the students in their observations and the study during a season which best lends itself to such work.

The work in Summer Science is divided into two parts. First, each student chooses to follow up at least one subject from a list prepared by the Science teacher. The following will illustrate what some of the boys are doing:

C. C. of Essex who is working on the Crane Estate, Ipswich, is becoming familiar with the plants with which he is working by collecting and mounting specimens of the leaves and flowers and also by recording with the specimens some of the information he will want to carry away with him.

H. B. of Hamilton is making his own notebook on diseases of poultry. He keeps a record of the appearance of the diseased birds and tries to determine the name and the cause of the disease, also the probable cure.

J. S. of Marblehead, who is carrying on an ownership project growing gladioli, is experimenting with many varieties in an effort to determine which do best on his soil. He expects that the results of this study will guide him in his choice of varieties another year.

The second part of the Science work includes making general observations and reporting them. The School is often called upon to furnish information about conditions in Essex County. In order to be better able to serve as an information bureau, the School appoints each student at its representative in reporting conditions in the community where he may be located. As an example of the reports sent in we cite the following:

G. S. S. of Newbury has observed that white grubs destroy potatoes by eating holes in them. He asks, "Is there any way to remedy this now? If not, what can be done to prevent it another year?"

W. A. of Byfield found on his tomatoes a dark-green worm about two inches long, with black eyes, and a black dot on each side. With it were about 100 eggs. The worm eats the leaves and causes the plants to turn brown. He asks what the name of the insect is and what he can do to control it.

C. H. of Stow, has some beans just maturing and finds that many of the stems are eaten at the surface of the ground, causing the death of the plant. In examining the plant he finds the centers are hollow but he cannot find any worms or insects.

R. N. of Peabody reports seeing corn borers and wishes to know the steps that should be taken by a farmer who learns that he has a bad infestation for the first time.

P. R. of Amesbury asks why it is that wormy fruit apparently ripen faster than sound fruit.

E. W. of Topsfield asks what is best to put on manure in a pit to keep flies from breeding without injuring the manure.

J. F. B. of Gloucester asks when forsythia should be cut back. He states that the new growth on bushes set out this spring is very long.

R. V. D. writes the following in his weekly report of August 17th. "The weather has come dangerously near freezing. Rain is needed very badly. So far we have had four thunderstorms but with very little rain. The Fall flowers are in bloom. Asters are coming in nicely. Hollyhocks are at their height just now and are very frequently seen. Insect life remains about the same as at the time of the last week's report. Birds are not so numerous. Robins, bluebirds, and the sparrow family continue to be our guests."

R. E. sent in the following Science notes on his report: "In this section it is not considered a scabby year, as it has been too dry. Crab apples are about ready to pick. Cider mills are starting up. Plums, peaches, and pears are all beginning to ripen. Tomatoes have been slow in ripening. We expect a frost at any time. Williams apples are about gone by. Gravenstein, Wealthy, and McIntosh drops are on the market. We got our first harvest of corn on August 24th from corn planted May 11th and 12th."

This same student sent the following letter, which illustrates very well the attitude taken by a student who has a man's job to handle. "As a rule on my science I generally put down those things that I notice and observe while at my daily work. Nothing would please me more than to go into the orchard for a day and just look the trees over — but it can't be done. I just haven't the time."

This comment brings out a point which I wish to emphasize, i.e., that the time to observe things is while at work. Such general observations as we find above, together with detailed studies about the topics selected from the list made out by the Science instructor, constitutes the work that is being done by the students in their Summer Science work.

APPLE CROP IN ESSEX COUNTY

(Continued from Page 1)

this is always desirable with first-grade or fancy fruit, it can be exchanged for a similar package, thus allowing the farmer to receive considerable of the package value in return. The School will gladly render assistance to anyone who wishes to handle their crop in a better manner than they may have done in the past.

Fruit growers who have an immediate prospect of increasing yields, the result of new orchards reaching maturity or of old orchards yielding as a result of better management, should welcome the Eastern Apple Exposition which will be held in New York City on November 3d to 10th. This is an epoch-making event for Eastern fruit growers and is being held to demonstrate many things of interest to both the fruit consumer and the fruit grower. It is hoped to prove beyond dispute that Eastern apples are carefully grown, that our growers are giving better attention to packages and packing, and that we have a quality and also a color inferior to no other section of the United States. With the increasing popularity and propaganda which has been carried on to popularize citrus fruits in our local markets, every one who has any pride in local fruit production should come forward and support this exposition. Not least among the methods of supporting this show should be to back it liberally in financial support. Why not make a definite and liberal donation to finance the Massachusetts exhibits? Fruit growers and producers of other agricultural staples have been doing this to their great mutual advantage for a long time.

Walter E. Moore, class of 1923, now an instructor in poultry and fruit at the John P. Holland Vocational School East Norfolk, Mass., visited the School recently.

NEW POULTRY HOUSE PLANS AVAILABLE

We now have available new blue prints of plans for a laying house 24 feet square. These plans were made from the new poultry house recently erected at the Essex County Agricultural School, and may be received by sending the County Agent 25c, (a charge made to cover cost of blue print paper). Many poultrymen have seen the house and speak highly of it. If down this way, call in and inspect it.

HOMEMAKING DEPARTMENT NOTES

On Tuesday, September 4th, the Homemaking Department opened for the fall term with a large entering class and a very interesting High School Special class. The first two weeks will be given to instruction and practical experience in canning, jelly making and pickling, and the making of aprons and caps to be used during the school year. After the students have received their instruction in canning of all kinds, each one is given a home project in which she must prove her ability to do the work alone.

Miss Margaret Hastings, who resigned in June, was married to Mr. John MacIvor in July and her position is being filled by Miss Louise Brightman of Dighton, Mass. Miss Brightman is a graduate of the Vocational Department at the Farmingham State Normal School.

Miss Amy Irish, resigned to accept a position in the Household Arts Department of the Somerville High School.

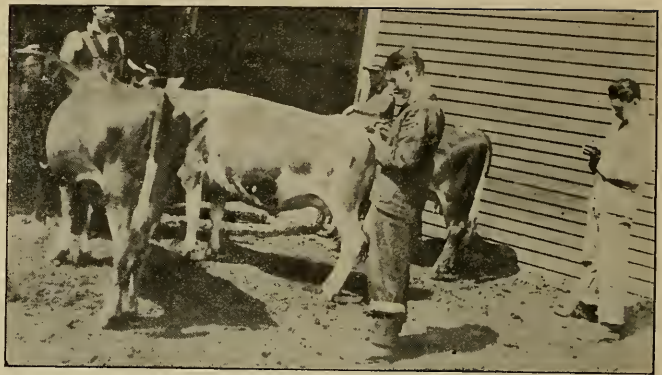
Miss Harriette Hunting of Cohitate, Mass., is a new member of the Homemaking Department faculty, filling the vacancy caused by the resignation of Miss Irish.

MAKE YOUR KITCHEN ATTRACTIVE

Is your kitchen an attractive place? It isn't, have you ever thought why it isn't? In the days of our Colonial ancestors, if we may believe the reproductions and pictures which we have of them, the kitchen was attractive and homey because it was the room in which the family not only worked but lived. The big fireplace with its high-backed settles, the backs made high to keep in the heat and keep out the cold, was cheerful in itself and sent its shining rays into every corner, and the sanded floor and vegetables drying from the ceiling, added their bit of color and brightness. We also have records of shining pewter and glass ware on shelves of natural wood polished to wonderful whiteness.

Much later, when the parlor and sitting-room became a necessity, all thought was given to the decoration of these rooms and usually the kitchen became only a work room. The cast-iron stove took the place of the cheerful fireplace and the family passed the kitchen by when they were ready for rest and recreation. Thus the room in which the home maker spent much of her time was only a work room and the idea of beautifying it and making it pleasing to the eye was little considered.

Another era came and some people



SENIORS JUDGING DAIRY CATTLE

wondered why the home laboratory should not be as attractive as other parts of the home, and it has been found not only possible but intensely practical to make the kitchen an attractive spot in which it will be a pleasure to work.

Look your kitchen over with a critical eye and see if you cannot make some changes which will add to the happiness of yourself and your family without depleting to any appreciable extent the family purse.

ESSEX AGGIES' HAPPY TRIO

Tryon Farm, a commercial dairy and poultry proposition, which comprises over 200 acres of land situated on a slightly hill in West Boxford, has been the home of students Howe, Dill, and Livermore during the entire summer project period. These three students have made good in every sense of the word, both in actual work accomplished, knowledge of agriculture gained, and the satisfactory keeping of records, reports, and diaries. Howe and Dill are in the dairy department caring for a fine herd of 20 Guernsey cows, while Livermore has had all the care and responsibility as well as all the work connected with the brooding and rearing of approximately 3500 chicks.

In spite of the fact that there is a lot of work to be done on this farm, the Manager has a way of finding an opportunity for the boys to get all the recreation possible and warm days they can find some time for a half or three quarters of an hour to spend at the old swimming hole. The farm is some distance from any large centre, but each week the boys have had an opportunity to go into town for a few hours to do their shopping. Taken as a whole our first experience with Tryon Farm has been a very profitable and pleasant one for everybody concerned.

AGRICULTURAL DEPARTMENT NOTES

Professor George A. Works of Cornell University visited this school recently with a class of students in agricultural education taking advanced degree work. After an inspection of the school, and farm, the remainder of the day was spent in visiting projects.

It is to be regretted that Richard Eustis of Marblehead will be unable to play football this season. "Dick" was operated upon for appendicitis in July and his doctor advises against playing this year.

Elmer Shattuck of Ballardvale has returned to his duties in the Dairy Division. About two months ago, Shattuck was obliged to give up his work at the School owing to a serious eye trouble. He has been under the care of Dr. Cheney of Boston and his condition is much improved.

Among the graduates who have made recent visits to the School are Tom Welch, 1922, Horace Foley, 1921 and "Woppy" Moreland, 1921.

Stephen Ives, (Ex. 1922) is taking care of the Rebecca Nurse Estate in Danvers in the absence of Superintendent Tipert.

Wallace Moreland, 1920, is now a Junior at Connecticut Agricultural College. "Woppy" has a variety of interests. Besides being President of his class, a star football man and an honor roll student, he is gathering in the shekels by caponizing cockerels, an accomplishment in which he is quite proficient.

James Lord, class of 1921, is in partnership with his older brother on a farm in Northwood, N. H.

ESSEX FARMER^{A_N} HOME MAKER

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HATHORNE, MASS., NOV., 1923

No. 6

POULTRY DAY AT HATHORNE NOVEMBER 22, 1923

Valuable Lectures and Business Program Arranged

Every person in Essex County interested in Poultry should reserve Thursday, November 22nd, for attendance at the Poultry Meeting to be held at the Agricultural School, Hathorne.

At this time the report of the committee appointed some time ago for the purpose of drawing up plans for a commercial association of poultrymen will be presented. This is a very important matter and should receive attention from every person connected with the poultry industry. The committee, consisting of B. Tomlinson, Chairman; W. B. Moore, West Peabody; H. A. Moulton, Topsfield; R. E. Parkhurst, Boxford; E. E. Anderson, Ballardvale; George Withers, Haverhill; and Walter Hulbert, Ipswich; has met several times in regard to this matter and after considering it from many angles has certain recommendations to make.

While the question involving a county organization will be in the nature of a business meeting, we will have two poultry experts to take part in our lecture program. Professor W. C. Monahan, Extension Specialist from the Massachusetts Agricultural College, will present some subject of timely interest, while Professor H. R. Lewis from Rhode Island will lecture on the industry in general. Professor Lewis is one of the country's most noted poultrymen and his message should be of extreme interest and value to us.

The program as given below provides for a short day session, allowing plenty of time for doing the morning and evening chores. Simply pack your lunch, load your car full of poultry enthusiasts and spend the day at your county school.

Program

- 10.00 A.M. to 11.00 A.M., Inspection of School Plant.
- 11.00 A.M. to 12.00 M., Lecture by Professor Monahan, M. A. C.
- 12.00 M. to 12.30 P.M., Basket Lunch, (Coffee to be on sale).
- 12.30 P.M. to 1.30 P.M., Business meeting in charge of County Agent.
- 1.30 P.M. to 3.00 P.M., Address by Professor H. R. Lewis, R. I. Subject—"Are We Entering a New Era in the Poultry Industry?"



THE SCHOOL EXHIBIT AT THE FAIRS

THE ROADSIDE MARKET

Attractive Stands Mean Increased Sales

Because of the tremendous increase in the roadside market as a means of disposing of farm produce, it seems advisable to give some attention to this type of market for it has come to stay, and adds one more method to our already complicated system of marketing farm produce.

The roadside market puts the farmer in much the same position as a merchant in the city. Both must maintain displays of goods, carry quality goods and give service, if they wish to develop a steady trade. To be successful, then, in operating a roadside stand, one's first requirements are to know a few fundamental principles of marketing.

It should be remembered that sales are based primarily on a display of goods. The exhibit must not only be neat, but attractive to the eye in order to draw attention, and having attracted attention, its next function is to make sales. The orderly arrangement of goods, properly placarded, (being sure to give the name of the article as well as the price) will do much in making sales.

Compare if you will some neatly arranged roadside market, where an effort has been made to make a showy display, with the all too common type

of roadside market, where no attempt has been made to set up a display. Such comparisons, whether made from actual conditions or by studying otherwise, are always interesting. It is not strange then why some motorists will catch a glimpse of a roadside stand and stop to examine the articles offered for sale, while the same motorists would keep right on going by the unattractive types of stands. It is a case of setting up a neat booth with the idea that it will attract attention.

At the Greater Lynn Fair and also at the County Fair, the Agricultural School, through its Extension Department erected two types of roadside market stands for demonstrative purposes. The effectiveness of the comparison was most striking and was the cause of much comment. "Exhibit A," shown on page one of this issue, represents a model exhibit as shown at the county fair, while "Exhibit B" was the undesirable type. The photograph of "Exhibit B" was unsuccessful so could not be used in connection with this article. Suffice it to say, however, that many of our stands come under the "Exhibit B" type, where articles are unprotected from the weather, are poorly arranged, are of poor quality, and the whole stand conveys the idea of a makeshift or an after-thought rather than a carefully conceived sales plan.

The following brief suggestions

(Continued on Page 3)

Essex Farmer and Home Maker

HATHORNE, MASS.

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CALENDAR

- Nov. 22—Meeting of County Poultrymen at the School. Speakers, Professor Lewis and Professor Monahan.
- Nov. 23—Conference of Home-Making Leaders at the School.
- Nov. 27—Graduation Exercises of Class of 1923, in Peabody Institute Hall, Danvers.
- Nov. 27—Alumni Meeting and Supper, followed by a reception.
- Nov. 28 to Dec. 1—Thanksgiving Recess.
- Dec. 19—Close of school for Christmas Recess.

PROGRAM OF GRADUATION EXERCISES

To Be Held in Peabody Institute, Danvers, on Tuesday, November.. 27th, at 2.00 P. M.

The program for the 8th Graduation Exercises of the Essex County Agricultural School follows:

- Invocation
Rev. L. E. Grubaugh, Danvers
- Song—"Fareland Waltz"
Home-Making Department Chorus
- Essay—"Clothing"
Marjorie N. Rowe, H. S. S. '23
- (a) "A Merry Life" Denza
(b) "Duna" McGill
(c) "Keep on Hopin'"
Heron-Maxwell
- Agricultural Department Glee Club
- Essay—"Marketing Eggs"
Alton G. Perkins, '23
- Essay—"Cookery"
Elizabeth A. Wagland, '23
- Home-Making Department Glee Club
- (a) Presentation of Gold Prizes offered by Mrs. R. S. Bauer for excellence in Summer Projects in Homemaking.
(b) Presentation of Gold Prizes offered by Ralph S. Bauer for excellence in Agricultural Projects.
- W. Stinson, Agent, State Department of Education
- School Orchestra



ESSEX COUNTY SQUASH SHIPPED TO IOWA FOR NATIONAL STATIONERS' BANQUET

Mr. Bauer, President of the Board of Trustees, has made a unique demonstration of Essex County agriculture. He caused a considerable shipment of squash grown on his own farm in Amesbury to be sent to Des Moines, Iowa, and there prepared by

the hotel management to be served at the annual banquet of the national stationers' association. We understand that the product was well received and that quite a taste for New England squash pie was created forthwith.

- Graduation Address
Honorable Frank G. Allen, President, Massachusetts State Senate
- Vocal Solo
Olive W. Blake, H. S. S. '24
- Presentation of Diplomas
President Ralph S. Bauer,
Board of Trustees
- Patriotic Song

The following are candidates for diplomas from the Agricultural Department:—C. Donald Anderson, Lynn; Eric H. Bergstrom, Lynn; Paul E. Brickett, Lynn; Alden F. Cressy, Beverly; Winslow Dunnells, Andover; Robert B. Ewing, Haverhill; Walter Knowlton, Wenham; Wesley T. Maxwell, Lynn; Walter E. Moore, Everett; Wendell R. Murray, Revere; Hugh Parkhurst, Gloucester; Alton G. Perkins, Lynn; Maxwell S. Roberts, Newbury; James N. Skinner, Marblehead; H. Edwin Williams, Danvers; Howard L. Barnes, Swampscott; James F. Duncan, Gloucester; and Burelgh Odiorne, Swampscott.

From the Home-Making Department the following are candidates for diplomas:—Barbara Adams, Rowley; Margaret Axelsson, Danvers; Grace E. Bixby, Lynn; Esther L. Bryer, Danvers; Irene Burnett, Lynn; Elizabeth B. Cronk, Marblehead; Arlene M. Fowler, Ward Hill; Doris H. Goodwin, Swampscott; Marion E. Keyes, Danvers; P. Marie Pension, Lynn; Marguerite Perkins, Lynn; Elizabeth Seale, Salem; Marion Small,

Peabody; Edith A. Sutter, Lynn; Josephine Tipert, Danvers; Elizabeth A. Wagland, Methuen; and Bernice Zwicker, Danvers.

From the High School Special Course, the following are candidates for certificates:—Mary Finch, Marblehead; Rosa A. Hill, Marblehead; Marjorie N. Rowe, Lynn; Anne K. Sanford, Hathorne; Dorothy M. Wiggin.

ALUMNI TICKETS

If graduates of the School will communicate with Director Smith, reserved seats admitting to the Graduation Exercises in Peabody Institute will be supplied.

SCHOOL NOTES

Superintendent R. P. Ireland of Gloucester has made arrangements with the Poultry division to offer a poultry course in the evening continuation schools of that city. Such a course has been offered for several years past and has always been well attended.

Register of Probate Horace H. Atherton, Jr., spoke before the student body on November 7. Mr. Atherton delivered a most entertaining talk on the work of the Probate Court.

Director Smith is ever on the alert to secure worthwhile speakers and it is due to his efforts that Mr. Atherton was persuaded to come to the School

EXTENSION SERVICE

HOME DEMONSTRATION WORK

Miss Lucile Reynolds, State Leader,
Meets Women of Essex County on
November 23rd at Hathorne

The new Home Demonstration Agent wishes to send a word of greeting to all the women of Essex County. She wants to become acquainted with you and can do so more quickly if you ask her for help. If she can be of any service to you in your home interests either visit her in her office or call up Danvers 50.

There is to be an interesting meeting held at the Essex County Agricultural School Friday, November 23rd, in the interests of the Extension Service. One or two women from each town have been invited to attend and discuss the particular problems of their own community. Women who have, during the past year, been leaders of some project in their town will tell of their success. Miss Lucile Reynolds, State Leader of Home Demonstration Agents, will be with us. We hope in this way to reach every community in the county and help the women solve their home problems. A buffet luncheon will be served by the Home-Making Department at a nominal price.

COUNTY WOMEN GETTING BUSY

The women of Essex County are again starting projects in the various lines of home activities. At this time of year their thoughts naturally turn to hats and dresses. Projects in Clothing Construction and Millinery are being carried on from the extreme southern part of the county, Lynn and Saugus, and the northern boundary, Amesbury and Merrimac. During October 157 women learned how to make their own dresses and hats. The amount of money saved in this way is surprising. The Merrimac group of 12 members alone saved \$55.00 by making their own hats.

SAUGUS INTERESTED IN HOME MANAGEMENT

The first meeting in Home Processes met October 17th with Mrs. Coon. The roll call showed thirteen present. Miss Crawford gave an outline of the course, and took dishwashing as the subject for the first meeting. Her informal talk was most interesting and brought out discussions and suggestions from all the class.

Among the points touched on were: the saving of dishes in cooking; the sink, correct height and desirable kinds; the use of tea wagon or tray in removing dishes from table; the proper tools for dishwashing; scalding and draining dishes instead of wiping them; dishes that are practical shape; the most convenient arrangement of dishwashing utensils, near sink or where they are to be used. Miss Crawford exhibited a dishpan rack which she considered

very practical for use in a low sink.

The class members were asked to time themselves doing dishes, both old way and new way, and report at next meeting. Also in preparation for the next meeting, to time themselves in their regular cleaning of a room.

Mrs. Ross Coon, Saugus Centre.

DRESS FORM DEMONSTRATIONS

The making of Dress Forms is being demonstrated for the first time in Amesbury. At the first demonstration a form was made before a group of 12 women by the sewing instructor. Before the next weekly meeting, three had been made at home. At the next meeting four forms were made by the class members before a group of 50 women. By November 15th we expect at least 15 will have been made.

Marion P. Crawford,
Home Demonstration Agent.

CLUB WORK FOR HIGH SCHOOLS

State Leader Visits County to Interest
Older Students

Essex County High School students are to have a chance at 4-H club work this winter. This work is carried on by the Extension Service of the Essex County Agricultural School in co-operation with the United States Department of Agriculture and the Massachusetts Agricultural College and such local authorities as school superintendents, principals, teachers and other interested people. County Club Agent DeQuoy has done quite a lot of work in the grammar schools in nearly every Essex County town and many of the club members of the past three years are now enrolled in High Schools. With the ground work done, it seems advisable to encourage club membership from our high school students. A request was sent George L. Farley, State Club Leader, to spend a little time in Essex County for the purpose of stimulating interest in club work in our high schools.

Mr. Farley is a good speaker. He has a pleasing manner which appeals to young and old and can hold interest for a solid hour with his human interest stories of club work about the state. He appeals to the students to take advantage of their opportunities, for however homely these opportunities may now appear, he tells them that they invariably blossom into profitable enterprises, if properly handled. For illustration, four years ago Mr. Farley went down through the Cape Cod towns assisting the County Club Agent in enrollment work. They naturally finished at Provincetown where the geographical inventory contains two items as being predominant—sand and ocean. A garden club or pig club was impossible for the youngsters but one boy, Francis Days, was bound to be a club member so he joined the Food Club

and started baking bread. He was the best in his club and the next year he started selling bread to summer visitors and was awarded the County Championship and the resulting trip to M. A. C. for a week. The next season he carried his commercial work still further taking his brother into partnership and doing a year-round business in their home kitchen. That was last year and Francis was proclaimed State Food Club Champion winning over girls and boys all over Massachusetts. He saw an opportunity and made the most of it. A number of other examples of club members' progress might be given but the above account serves to illustrate how club work may help boys or girls to make the most of their opportunities.

A good response from the High School pupils resulted and a large number accepted the enrollment cards. Their principals and teachers showed an active interest in club work and prospects for its success are good. Memberships in Poultry, Sewing, Food and Dairy Clubs were solicited. Those who became club members will have a good chance to learn useful occupations and in many cases earn some cash this winter.

Stanley DeQuoy,
County Club Agent.

THE ROADSIDE MARKET

(Continued from Page 1)

may be of value in the establishment and operation of a roadside stand.

The Farm. The grounds in the immediate vicinity should be well kept and attractive. Well kept grounds speak volumes for the proprietor's ability as a farmer. A name for the farm and booth with signs directing people to the place is a valuable asset in establishing a trade.

The Stand. The market stand need not be elaborate, but it should be attractive and kept clean. It should be arranged to allow an instant's survey to take in every product offered for sale. By all means provide a roof for the stand to protect the products from the sun and rain. Cooked food should also be protected from flies.

The Products. Farm and household products offered for sale should be of high quality and the name of the product neatly and conspicuously marked so the hurried purchaser will know what is being offered for sale without taking time to ask questions.

The Price. Just because one caters largely to a transient trade, do not get away with the common idea that it is good business to "get the money while the getting is good." The practice of "soaking" transients sooner or later results in a diminished trade. Be satisfied with the current retail price for high quality goods.

Bertram Tomlinson,
County Agricultural Agent.

HOME-MAKING DEPARTMENT

SALADS

Their Value in the Diet

There is positive need of more widespread knowledge of the principles of cookery and the adaptation of that knowledge. By many women cooking is considered at best a homely art, a necessary kind of drudgery, but that day is rapidly passing into oblivion.

Some foods when cooked lose certain protective substances called vitamins and for that reason we should learn to appreciate the value of fresh fruits and vegetables, particularly celery, tomatoes, fruits, nuts, and greens. These vitamins are very important to the well-being of the body and their absence is certainly responsible for certain diseases and undernourished children as well as much ill-health of a less definite sort.

The best and most attractive way to furnish these necessary substances is through salads in our diet. Salads are compounds of cold, cooked, delicate meats, fish, shellfish, eggs, cheese, nuts, fruits, and vegetables cooked and uncooked, with a salad green which might be lettuce, chicory, endive, romain, water cress, cabbage, with celery, radishes, and cucumbers as extenders, and a dressing.

The digestibility of salads depends in a large measure on the tenderness of the different ingredients as well as upon the freshness of the vegetables that enter into their composition. A salad, but not every salad, is suitable to serve upon every occasion or to any class of condition of men.

Salad greens have but little food value but are very useful for the water and the mineral salts they contain, besides being cooling and refreshing, and stimulating to the appetite. In selecting salad greens choose only those that are fresh and crisp.

In preparing the salad ingredients, remember that this takes time but surely it is worth it. Salads are "marinated" with oil, acid, and condiments, and sometimes a sweet dressing containing honey or sugar is used. The presence of vinegar in a dressing, like that of onions and its relatives, should be suspected only.

The character of the dressing should be dictated by the place of the salad in the meal. All light salads, which are to constitute one course at dinner, should be served with a French dressing or one of its derivatives. That same salad dressing may be served on luncheon or supper salads if desired but when served as a main course, it is customary to serve mayonnaise or boiled dressing with cream. If the salad ingredients are fat or very rich, the boiled dressing should be used; if deficient in fat, the mayonnaise combines well dietically.

The selection of a salad oil is becoming more and more of a problem.

People are beginning to appreciate the dietetic value of salads dressed with oil. Olive oil is expensive and good substitutes are on the market. Peanut oil, cottonseed oil, and corn oil are taking the place of olive oil in many homes and by adding a little more acid and supplying higher seasonings, a very tasty mayonnaise can be made. A mixture of one-third olive oil to two-thirds of any of these other oils will give an olive oil flavor at a lower cost.

Salads are not acceptable unless served cold and for this reason, especially if they are taken near the close of the meal, they are apt to retard digestion.

To sum up the requirements for a real salad:

1. All ingredients must be cold.
2. Greens should be crisp and dry.
3. Salad should be moist but not too moist.
4. Salad dishes should be cold.
5. Meat and fish should be well "marinated."
6. Ingredients composing the salads should not be combined until the last moment before serving.
7. The salad should be attractively arranged and garnished, "for the eye does half the eating."

GIRLS' ATHLETICS

Basketball Outlook Very Promising

The girls of the Home-Making Department who are members of the basketball team have entered into the game with great enthusiasm and hope to win a good many games this year. They have been practicing successfully under Miss Brightman's coaching. The first game will be played Wednesday, November 14th, with Pynchard High at Andover.

The Freshmen and Juniors have organized teams and played their first game in the recent track meet, the Juniors defeating the Freshmen 23-22. The team consists of: Eunice Carey, C.; Gladys Hulsman, S. C.; Frances Martin, F.; Leslie Wagland, F.; Gertrude Jones, G.; Eleanor Oulton, G. Captain, Eleanor Oulton; Manager, Leslie Wagland.

INTER-CLASS TRACK MEET

The annual Inter-class Track Meet was held on Tuesday, October 30. Both the Agricultural and Home-Making Departments of the School participated in the various events and the contestants tried hard to break previous records. The Senior Class won with a total of 114 points. The Junior Class scored 53½ points, Sophomore Class 42½ points, while the Freshmen secured 10 points. Oliver Holmes and Miss Greenleaf were the highest point winners, each scoring 19 points.

FOOTBALL SCHEDULE

Nov. 24—Danvers at Danvers, 3 p. m.
Nov. 29—Methuen at Methuen.

HOME PROJECT CANNING

Girls Apply at Home Instructions Received at School

During the first two weeks of the fall term, the students in the Home-Making Department are taught to do all kinds of canning for the preservation of fruits and vegetables. After the instruction has been given and each girl has done the work in the school kitchen, she is given the following home project which must be completed before she can pass her year's work.

Canning requirements: 10 pints fruit; 10 pints vegetables; 5 jars pickles of some kind; 6 glasses of jelly; 6 glasses of marmalade, conserve or jam.

Credit is given for canning more than the required amount. As a result of the home project canning, the following list gives the amount of canning done by the 71 girls at their own homes from September 17th to November 1st, 1923.

365 quarts fruits; 365½ quarts vegetables; 99 gallons, 1½ pints pickles, relishes, piccalilli; 1164½ glasses of jelly, jam, marmalade, conserve, and preserves; 5 quarts of mincemeat; and 30 dozen eggs put down.

Marblehead Girl Has Biggest Project

Miss Ruth Peach of Marblehead is the champion in the Home-Making Department for amount of production in canning. She has canned at home in six weeks 11 quarts of fruits, 10 quarts of vegetables, 55 glasses of jelly, 27 glasses of marmalade, 8 glasses of jam, and 22½ quarts of different kinds of pickles and relishes. All this was done while attending school every day.

DEPARTMENT NOTES

On September 15 and October 20 the faculty of the Home-Making Department enjoyed two very pleasant week-end house-parties at Jaffrey's Point, Ipswich, Mass. With walking, riding, swimming, "clammering," and a general good time, the week-ends passed all too quickly.

Elsie Livingstone, who was a member of the Class of 1924 last year, is now training at the Lowell General Hospital, Lowell, Mass.

Marjorie Rowe, a member of the High School Special Class, 1923, is at present attending the Boston School of Domestic Science, Boston, Mass.

The High School Specials and two members of the Senior Class, accompanied by two instructors, Miss Browne and Miss Breed, visited the Textile Exhibition at Mechanics Hall, Boston, on Friday, November 2nd. The exhibit was very instructive and the visit was made in connection with the course in Textiles which is a part of the school curriculum.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 5

HATHORNE, MASS., JANUARY, 1924

No. 1

\$100.00 in GOLD AGAIN AWARDED
BY MR. AND MRS. R. S. BAUER
OF LYNN FOR EXCELLENCE
IN AGRICULTURE AND HOME-
MAKING.

A Like Amount Given by Hon. Frank
G. Allen, President of the Mass.
State Senate.

Interest in the Bauer Prizes seems to grow with each succeeding year. Never has there been keener competition than during the year just past. The prizes are awarded to the students making the most noteworthy advance in agricultural accomplishment. In addition to the prizes offered by Mr. and Mrs. Bauer, the Hon. Frank G. Allen, President of the Mass. State Senate awarded an equal amount to the prize winners.

The prizes for the year 1923 were awarded as follows:

Agricultural Department:—Sidney Butler, Methuen, first prize; Harold Dowding, Methuen, second; Robert Lewis, Andover, third; Oliver Holmes, Swampscott, fourth; Walter Wilkinson, Jr., Lynnfield, fifth.

The prizes in the Homemaking Department are awarded for excellence in summer projects in line with the work given in that department. They were awarded for the year 1923 as follows:

Janet Dyer, Danvers, first prize; Madeleine Walker, Beverly, second; Gladys Hulsman, Lynn, third; Mabelle Batchelder, Lynn, fourth; Doris Garland, Newburyport, fifth.

The first Bauer prize for agricultural accomplishment was awarded to a first year student, Sidney Butler of Methuen. While at school, last winter, this young man planned a three-quarter acre garden, drawing plans to scale, and making all other necessary preparations for an early start in the spring.

He purchased seed early to carry on germination tests and also purchased chemicals for the home mixing of fertilizer. It was probably very evident to the judges that this young man made use of the knowledge he had gained at school through his willingness to put new methods of rec-



Winners of the Bauer Prizes in Agriculture and Homemaking

ognized worth into practice. As a result of good farm practice his land is already in excellent shape for a fine garden next year.

The boy's garden was located fully a mile from his home and the soil was of a nature which required hard and constant labor to get results. In addition to the garden project he raised seven fine hogs during the season. The young man succeeded because of his perseverance and "gumption". This characteristic which made him carry on (even under adverse conditions) won for him the coveted prize.

Janet Dyer who received the first Bauer prize for excellence in her summer project lives in Danvers and is one of a family of nine children. At the time she received the prize, she was fifteen years and a half. Because of the illness of her mother, Janet's project for her junior year was the entire charge of a five months' old baby girl. Later it developed that the whole care of the home and children devolved upon her and her sister. That meant that the welfare of ten people, including three little children was dependent upon her knowledge, and ability to put into practice what she had been taught in her school work. She cooked, prepared meals, washed, ironed, and kept the house in order and cared for the children; she was, and is, the "little mother" of the family, and the happy smiling faces of the children and her tidy home show how successful a "manager" she is.

FARMERS' DAY PROGRAM Elaborate Program for March 12th.

Plans for holding the tenth Annual Farmers' Day at the Agricultural School, Hathorne, are well under way and the event promises to be a record breaker from every standpoint.

Aside from the lecture program which is always a drawing card, there will be featured a trade exhibit, and a school exhibit which will include each department. One of the features this year in the school exhibit will be that of the farm machinery department. Under the direction of Mr. Hammond, the instructor, many of the school implements have been overhauled and these will be on display with suitable placards showing the cost of doing the work.

Another feature will be moving pictures, preceding the morning speaker. We hope to have an agricultural film issued by the United States Department of Agriculture on some subject that will be of special interest to this section.

Those who have attended the meetings in the past appreciate the value of the social opportunities as well as the opportunities of getting subject matter from lectures and demonstrations. This year our program will be arranged with fewer conflicts of speakers scheduled, so there will be more chance for enjoying the exhibits and personal contacts.

A complete program will be given in the next issue, as well as in all the county papers.

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

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CALENDAR

- Jan. 21—Third term opened for Agricultural Department.
Feb. 8—Regular meeting of Essex Commercial Poultrymen's Association at Hathorne, 1 p. m. Subject, "Incubation", by Professor W. C. Sanctuary. Business Meeting.
Feb. 22—Holiday. Washington's Birthday.
Feb. 29—Second term ends in Homemaking Department.
Mar. 1-8—Vacation, Homemaking Department.
Mar. 7—Third term ends in Agricultural Department.
Mar. 10—Third term opens in Homemaking Department.
Mar. 10—Fourth term opens in Agricultural Department.
Mar. 12—Tenth Annual Farmers' Day, at Hathorne, Mass.

EDITORIAL

The following paragraphs are quoted from a letter written by Mr. Herbert Hoover to Mr. J. C. Wright, Director of Federal Board of Vocational Education, Washington, D. C.

The paragraphs quoted, state the views as they are understood by one who is in a position to pass judgment upon them.

"My attention has been called to comments in the press on the increasing cost of education, and most particularly of vocational education in our public schools. Expenditures in the States last year under the Federal Vocational Education Act amounted to less than \$15,000,000, or approximately 15 cents per capita. Of this amount States and local communities contributed in round numbers \$11,000,000, and the Federal Government \$4,000,000. Thus the States and local communities contributed 11 cents and the Federal Government 4 cents per capita of population for the promotion of vocational education under this act.

This cost can not be regarded as constituting a serious financial burden upon the community. It is approximately the cost of a medium sized battleship. Certain indirect costs of this form of education cannot be accurately estimated, but in the aggregate they are relatively to our wealth and population insignificant. If vocational education is worth while, certainly as a nation we can afford the price of such education. Our only concern is to know that it is worth while.

We in this country believe that education in general pays for itself and is worth while, and if this is true of any sort of education it is certainly true of vocational education—that it pays for itself.

Having taken the lead in vocational education, we certainly shall not now permit ourselves to slip back because of a notion of false economy. I have been thinking particularly of the service rendered by vocational education in the broad fields of industry and commerce, but the social and economic value of such education is of course equally great in other fields. There is, in fact, no better economy than the economy of adequate training for the pursuits of agriculture, commerce, industry, and the home. Our youth must enter into these pursuits, and it is on all counts in the public interest that they be well trained for them.

Mr. Arthur E. Urquhart of Beverly Farms, has taken up his duties in the horticultural division at the School. Mr. Urquhart is well qualified for the work both in training and experience, having completed both his studies and his practical work at the Edinburgh Botanical Gardens.

He has been responsible for some excellent work in both private and commercial places in this country. Mr. Urquhart is a member of the North Shore Horticultural Society.

NEW BOOKS ADDED TO THE SCHOOL LIBRARY

Several valuable books were acquired for school use during the month of December. Among the most recent publications are the following:

"Standard Plant Names", American Joint Commission on Horticultural Nomenclature, Harlan P. Kelsey, Salem, Mass., Sec.; "How to Make Homemade Flowers", Ada Jones Smith; "The Flower Garden", Bennett; "First Book of Forestry", Filibert Roth; "The Small Nursery", Nelson Coon; "Trees as Good Citizens", Charles Lathrop Pack; "The Encyclopedia of Food", Artemas Ward; "Marketing Poultry Products", Earl W. Benjamin; "A Handbook on Positive Health", Woman's Health Foundation; "Tall Bearded Iris", Walter Stager; "Efficient Marketing for Agriculture", Theodore Macklin; "Effective Farming", H. O. Sampson.

ATHLETIC ASSOCIATION HAS NEW GOVERNING BOARD

Elects Advisory Council

At a recent meeting of the E. A. A. A., an Advisory Council consisting of seven members was elected. The purpose of this body is two-fold: first, to have complete control of the awarding of all athletic insignia; second, to work with the Athletic Director in the making of athletic schedules in the various sports fostered by the A. A.

The board consists of seven members: two from the Home-Making Department; two from the Agricultural Department; one member from the Alumni; one from the Faculty; and the Athletic Director, ex-officio. There is a broad field for work for this new committee and the action which resulted in its election should be a lasting benefit to athletics. For the first time the Alumni now have a voice in athletics at Essex Aggie combined with the students and faculty. It is hoped that Alumni interest and support will thereby be materially increased.

The members elected to the Council are: Constant Dreano, Wilfred Jordan, Eleanor Oulton, Leslie Wagland, J. E. Eastwood (Alumni), Mr. W. B. Moore (Faculty), O. A. Page (ex-officio).

1924 BASKETBALL SCHEDULE

- Jan. 9—Essex Aggie vs. Alumni at Hathorne
Jan. 11—Essex Aggie vs. Marblehead High at Marblehead
Jan. 16—Essex Aggie vs. Johnson High at Hathorne
Jan. 18—Essex Aggie vs. Punchard High at Andover
Jan. 26—Essex Aggie vs. Gloucester High at Gloucester
Jan. 30—Essex Aggie vs. Beverly High at Hathorne
Feb. 1—Essex Aggie vs. Norfolk Aggies at Hathorne
Feb. 6—Essex Aggie vs. Gloucester High at Hathorne
Feb. 8—Essex Aggie vs. Bristol Aggies at Segreganset
Feb. 13—Essex Aggie vs. Marblehead High at Hathorne
Feb. 16—Essex Aggie vs. Beverly High at Beverly
Feb. 19—Essex Aggie vs. Everett High at Hathorne
Feb. 27—Essex Aggie vs. Punchard High at Hathorne
Mar. 1—Essex Aggie vs. Lynn Classical High at Lynn
Mar. 5—Essex Aggie vs. Johnson High at North Andover
Mar. 7—Essex Aggie vs. Norfolk Aggies at Walpole
Mar. 14—Essex Aggie vs. Bristol Aggies at Hathorne
Mar. 21—Essex Aggie vs. Everett High at Everett

COUNTY AGRICULTURAL AGENT

COUNTY AGENT ASSISTS IN ORGANIZING POULTRYMEN.

As a result of several poultry meetings held during the past summer and fall, it has been possible to effect an organization known as the Essex County Commercial Poultrymen's Association. This association will be a real asset to the industry in the county as may be seen from Article II of the by-laws adopted which states the object of the association as follows:

ARTICLE II. OBJECTS

"The objects of this association are to promote, protect and represent the business, economic and educational interests of commercial poultrymen in Essex County so as to make the industry more profitable; to advertise Essex County products; to develop a more equable system of marketing poultry products and to foster and encourage the breeding of better stock through exhibitions and otherwise."

The association plans to publish a monthly paper for the benefit of its members, and the first issue has already been mailed. It is known as "The Essex County Poultryman." Every poultryman should get behind this association, and support its activities by becoming an active member.

One of the first pieces of work tackled by the Executive Committee is that of more efficient marketing. A plan is being worked out whereby each member will cooperate in producing a product uniform in quality and second to none in the country. Each member will continue to act as his own sales agent, as the association does not plan to enter the field of co-operative marketing. It will, however, act in a supervisory way in the matter of establishing and enforcing a standard of quality.

Those poultrymen in the county who are interested in the industry would do well to attend the next regular meeting of the Association scheduled Friday, February 8th, to be held at the Agricultural School, Hathorne, at 1:00 P. M. There will be a talk on incubation problems by Professor W. C. Sanctuary, M. A. C., followed by a very important business meeting at which it is hoped Dr. R. F. McFall will be present to discuss with us plans for establishing a quality product that will be known and respected all over Essex County.

Invitation to attend this meeting is open to all poultry keepers whether or not members of the Association. Bring the wife along too. Some of our best poultry flocks are managed by women.

FARM ACCOUNTING

Farm accounting is still an important factor in the farm organization. The changes that are taking place in our county agriculture need close observation and study. Just because an enterprise paid once, is no excuse to conclude that it can be made to pay again. Times are changing. How about your farm enterprise? Do you know the best paying projects for your farm?

Those who are keeping the farm account book are not guessing. They have the facts from which to reach their conclusions. A few books are on hand at the Extension Service Office, Hathorne. These are free to co-operators.



BRIDGE GRAFTING SAVED THIS TREE

The above picture is a remarkable close-up view of some bridge grafting work done by the County Agent and Mr. Meigs who is Head of the Fruit Department of the Agricultural School. Mr. Arthur Usher, Andover St., Danvers, who owns the tree, called us up on the phone the latter part of June and asked what could be done to save the tree. After a hasty inspection, it was found that it would be necessary to resort to bridge grafting. Through the kindness of Professor Sears of the Massachusetts Agricultural College some dormant scions were secured, and the actual operation took place July 2nd. Fourteen scions were used on the tree, and all but one made a union with the result that the tree went through the growing season and yielded several barrels of fine fruit.

COUNTY AGENT ACTIVITIES FOR 1923

The following statistical summary accounts for the County Agent's activities from December 1, 1922 to November 30, 1923, inclusive:

Days in the field	136.42
Days in the office	133.58
No. farmers visited on farms..	182
Calls on demonstrators	128
Total farm calls	310
Office and phone calls	180
Automobile Tours	4
Attendance	225
Demonstration meetings	23
Attendance	479
Miscellaneous meetings	27
Attendance	1054
County planning meetings	2
Attendance	53
Individual letters prepared ...	650
Circular letters prepared	79
Circular letters mailed	22,635
News articles prepared	45
Farm Account Books distributed	12
Poultry Account Books distributed	63
Number instances where assistance was rendered on disease control of poultry	92
Post mortems conducted	45
Assistance on poultry housing (plans furnished)	31
Caponizing demonstrations ...	9
Killing and picking demonstrations	2
Potato dusting demonstrations	3
Potato economic demonstrations	1
Dairy meetings	2
Apple Scab Control demonstrations	3
Thinning demonstrations	2
Bridge-grafting demonstrations	1
Market exhibits (7 days at 2 fairs)	1
Organizations assisted in forming	1

As will be seen from the statistical summary presented, the poultry project received the most attention from the County Agent. This was in response to the ever increasing demand for assistance in this industry which is greatly on the increase in Essex County.

ANNUAL FARMERS' DAY AT
HATHORNE, MARCH 12TH.

HOME DEMONSTRATION AGENT

A HAPPY NEW YEAR TO ALL THE HOMEMAKERS OF ESSEX COUNTY

Were You One of These?

113 different women attended meetings conducted by the Extension Department during the month of December.

Extracts From Annual Report of Home Demonstration Agent.

The number of communities participating in the various projects were as follows:

Organization (new)	17
Food Preservation	8
Nutrition	8
Clothing Construction	23
Millinery	22
Home Management	4
Traveling Libraries	7
Garments made	180
Hats made	364
Value of hats made	\$1451.89
Value of garments made....	1142.94
Value of dress forms	667.50
Savings on hats made	915.00
Homes influenced to serve better meals	30

Note: This work covers a period of 8 months only. The county was without a Home Demonstration Agent for 4 months.

PRESSURE COOKER.

A Pressure Cooker Company has offered to loan their cooker to Essex County for an indefinite period. Demonstrations will be given at an early date. If you are interested, send your name to the Home Demonstration Agent.

LIST OF BOOKS IN TRAVELLING LIBRARY

Extension Department

"The Efficient Kitchen", Child; "Food Products", Sherman; "Food and Household Management", Kinne & Cooley; "Food for the Worker", Stein & Spitz; "Hints to Housewives", "Modern Industry", Kelley; "Clothing for Women", Baldt; "Fundamental Basis of Nutrition", Lusk; "An Adequate Diet", Stiles; "Shelter and Clothing", Kinne & Cooley; "A guide to Laundry Work", Chambers; "Practical Dietetics", Pattee; "Economical Menus", Bradley; "Nutrition of the Household", Brewster; "Feeding the Family", Rose; "New Housekeeping", Frederick; "Fuels of a Household", White; "Textiles", Dooley; "Table Service", Allen; "Food and Health", Kinne & Cooley; "Economical Cooking", Gibbs; "Bacteria, Yeasts and Molds in the Home", Conn; "Successful Canning and Preserving", Powell, "Successful Family Life on a Moderate Income", Mary Hinman Abel.

SAVING ON FUEL BILLS

Much of the fuel bill, where gas or oil is used, can be saved by carefully planning and managing the cooking. Here are several points to be remembered:

Don't light the stove till your cooking utensil is ready to go on the fire. Every minute the burner runs without the food over it is that much waste.

If you do not have another dish to put on when one gets done, turn out the fire if only for a few minutes. Matches are cheaper than fuel.

Don't heat more water than you are going to use nor heat it hotter than you are going to need it.

When boiling foods, remember that the temperature never gets above 212 degrees whether you have the heat high or low and that the food does not cook any faster after it reaches the boiling point whether you have the heat high or low. The only result of a high flame at this time is to boil off the water faster and unless this is the object, a high flame is a waste of fuel. When having a roast, plan for a baked dessert.

Planning the Best Meals

The following menu received the highest score of 97% in a meal planning contest in New Jersey.

Breakfast—Oranges, oatmeal, eggs or toast, cocoa.

Dinner—Casserole of lamb (potatoes, peas, carrots, onions) cabbage and apple salad, custard, bread and butter, coffee or milk.

Supper—Macaroni with cheese, baked potatoes, baked apples, oatmeal cookies, milk.

In respect to nutritive value the menu was perfect—the children would get their quart of milk daily, the adults their pint of milk and the right quantity of vegetables and fruit including green vegetables.

The cost of the meals was estimated at \$1.70 and the time taken in preparation at 2½ hours. These two factors are important in judging a menu.

FIRST MEETING OF LOCAL LEADERS

Reports Given and Plans Made

A meeting of the women of Essex County interested in Extension work was held at the Agricultural School in Hathorne November 23rd. There were 41 women present representing 18 communities.

Miss Lucile W. Reynolds, State Leader of Home Demonstration Agents, was present and outlined the opportunities offered women of the county through the different departments of Extension Service. Most interesting reports were given describing the work which has been carried on during the past year in several communities. Mrs. C. S. Jameson of Saugus, Mrs. U. B. Jenkins of Cliftondale and Mrs. M. F. Manning of Amesbury told of the Clothing Construction work carried on in their communities under Leader Training.

The Home Management project carried in Bradford and Saugus were described by Mrs. Ralph Marshall and Mrs. Ross Coon.

Mrs. Horace Brown and Mrs. Fred Kilham described the course in Nutrition given to women of West Newbury and Hamilton.

Work in Millinery was explained by Mrs. George Sargent of Merrimac.

Following these reports an opportunity was given for discussion and many questions were asked by the women interested in starting similar work in other towns.

Luncheon was served by the students of the Homemaking Department and music was furnished by the Girl's Glee Club.

It was a fine get-together meeting. It was voted to meet again in May and form a more definite organization. We hope at that time that every town in Essex County will be represented.

Stewed tomatoes would have been better than baked potatoes with macaroni and cheese.

CAN YOU ANSWER THESE QUESTIONS?

1. Do you know what your Extension Department offers?
2. Has your town taken advantage of all its opportunities?
3. Has your town a Local Leader?
4. Do you know who she is?
5. Have you asked for the Travelling Library?
6. Have you asked for the latest bulletin in Meal Planning?
7. Have you bought your Household Account Book for 1924?
8. Now that you have that dress and hat made, do you want help in arranging your kitchen equipment or in general care of the home?
9. Do you want help in packing John's lunch box?

Write to the Home Demonstration Agent, Essex County Agricultural School and she will be glad to help you answer these questions.

COUNTY CLUB AGENT

ESSEX AGGIE STUDENT STATE CHAMPION

Madeleine Walker of Beverly Leads in Food Club Work

Six years at one job! Sounds like some of the Boston Post stories about long terms of employment in these days of quick changes. But this is a different story. It is all about sixteen year old Madeleine Walker of Beverly who has been the best "sticker" in Essex County 4-H Food Club Work. The year she was ten, Madeleine joined a Food Club under the leadership of Miss Parker at the Beverly Health Center and she learned quickly all about making good bread. After staying in the club for four years, Madeleine won the County Championship. This meant that the State Leader who judged all the food exhibits in Essex County decided her work the best.

The main reward was the honor of winning. The secondary satisfaction was a free trip to the Massachusetts Agricultural College for a week's vacation the following summer. Essex Aggie made the trip pleasant by providing automobile transportation for Madeleine and the seven other champions of various clubs in Essex County. At Amherst a lot of talking was done about "local leadership".

The hundred and more champions from various Massachusetts counties absorbed this idea and resolved to help the work which had helped them by acting as Local Leaders. Madeleine kept her resolution alive and last winter she took charge of a club of younger girls at the Health Center, Beverly, thereby helping out her leader, Miss Parker. She also continued her own work and had branched out from simply baking bread and muffins to planning and preparing meals which came up to the dietetic and economic requirements of modern domestic science.

Records and stories, the bugbear of club members, did not bother Madeleine and when the season of food club work ended last spring, her records came in and after the County Club Agent had compared them with others and received Miss Parker's recommendation they were submitted to the State Leaders as evidence of the work of our State Food Club Championship candidate. Shortly after, the news of her success arrived.

A happy coincidence occurred in connection with the choice of State Champions. On the Amherst trip Madeleine formed a warm friendship with Evelyn Landry of Methuen, the County Clothing Champion. When the trip was over and the girls returned to their homes, which are twenty-five miles apart, they started a correspondence which has kept their friendship alive ever since. They were bound

they would win the State Championship in their respective clubs and on Christmas morning they each received a letter informing them that they each were State Champions. And so next summer they will again journey to Amherst the State Champions of the two most popular and hardest contested clubs in Home Economic Work. What if Madeleine had dropped out after one, two, three or even four years? Stickers win!



Madeleine Walker

Last year Madeleine enrolled in the Homemaking Department at Aggie. She likes the school and enters into the sports as well as the studies. Food Club Work has not been her only activity as she has belonged to Canning Clubs and Big Sister Clubs having been County Champion in the former.

CLUB CLIPPINGS

From the official State Championship announcement from M. A. C. This is but part of the article.

"Evelyn Landry, Methuen, Mass.

Although only a second year club member, it is doubtful whether in all club work in the state, there has been a more energetic, enthusiastic, earnest worker for the glory of the club work, than Evelyn."

Pig, Calf, Garden and Canning Champions will soon be selected and their names will be sent to the press in various Essex County towns. We regret that it is impossible to have the announcement ready for this issue of Essex Aggie's own paper.

AGGIE DEMONSTRATION TEAM AT BOSTON

Ober and Sproul Make Fine Showing in Stiff Competition

Demonstrating the practices club work has taught is one of the jobs our club members have before them. This club work is growing faster and faster and everywhere in this country the boys and girls are passing on the good word to others. The demonstrations are carried on in two ways. The most common method is to have the club members follow some up-to-date practice in gardening, sewing, poultry, clothing or other project at home. The neighbors see the method and result. If it works well the neighbors will use the new method.

Another scheme is to have teams of two club members each study up on some phase of a project and train them in talking to an audience and also in actually doing the operation discussed at the same time. Some demonstration subjects are: Mixing Feed, Pattern Making, Bread Mixing, Darning or Poultry Keeping.

The Essex Aggie Poultry Club furnished Clifton Ober of Wenham and Robert Sproul of Byfield as Essex County's Poultry Demonstration Team at the Boston Poultry Show last week. Armed with a scoop, shovel and several kinds of grain and some feeding equipment they were taken to the Show on Friday and there they stood before two hundred interested people. They arranged their equipment part of which represented a feed mixing floor and part a poultry house with litter on the floor and feeders and water can in place. Sproul introduced the team and described the demonstration, dwelling on the economy and other advantages of home mixing of feeds. Ober dumped the mash materials and mixed them. This simple operation drew a lot of attention and many questions were asked of Sproul. Then the mash was bagged and the scratch feed also was mixed. After that Ober handled the conversation as to how to feed the flock while Sproul fed mash, milk and scratch feed. Ober received a regular shower of questions which he handled in a way that convinced the judges that he knew his subject. The team was awarded third, being beaten only by Norfolk County's Poultry Vaccination Team and Suffolk County's Egg Preservation Team. The other five teams competing were well trained and eager to win so the Essex Aggie boys earned a real win. These Aggie boys are first year students and do not study poultry so this is real 4-H Club Work.

LIGHT AN IMPORTANT FACTOR IN COLOR DEVELOPMENT

The following article prepared by Professor F. E. Cole will interest many fruit growers who are anxious to produce highly colored fruit.

Light is the most important factor in the development of the kind of organic red coloring matter which is present in apples. Not diffused light, but direct concentrated rays are necessary for the best development of this cell sap coloring material. The next most important factor is a supply of carbohydrates in the simpler forms, as sugar. During the early part of the season the carbohydrates are largely in the form of starch, but as the apple matures the starch breaks down into the more simple compounds, as is exemplified by the gradual sweetening of the apple. The third factor in the development of this coloring matter is temperature and contrary to the ideas of many folks, it is not the high temperatures that are the most helpful but the cooler ones. Thus, direct sunlight, an adequate supply of the sugars and a fairly cool temperature constitute optimum conditions for the development of the cell sap coloring material called anthocyan.

The acidity of the cell sap determines the exact shade of the color and this acidity is largely a hereditary factor.

It is also true that the production of carbohydrates in any individual leaf is directly proportional to the amount of direct light that the leaf receives.

This intense light, or direct sunshine, is needed during the latter part of the season when the fruit is coloring.

All this means that light in fairly large quantities should be obtained all through the tree by consistent pruning over a period of years and by proper soil management.

Much disappointment has been experienced by some fruit growers because they did not secure the benefits herein suggested.

Their results are probably due to the fact that they did not take out any more wood than was replaced by the middle of July or the first of August, previous to the time when the fruit does its coloring, or to the fact that the tree continued its growth and retarded maturity to an unseasonable date.

In the near future a few pruning demonstrations will be arranged at which Professor Cole will demonstrate his methods of pruning.

Watch your local paper for announcements.

SEASONABLE NOTES

Are your incubators all cleaned, disinfected and in running order?

By the way, have you ordered your day-old chicks or hatching eggs for this coming season?

Live poultrymen visit poultry shows.

Look over your brooder stoves and see if they are all in readiness for their big job.

Are your breeders selected for 1924?

Now is the time to mate your birds for the breeding pens. At this time of the year the average poultryman should consider his breeding stock so that he can build up his egg production and also maintain the health and vigor of his flock.

It is not best to wait much after the 20th of January for thicker ice. Six-inch ice is better than no ice at all.

Keep the team busy hauling cord wood or manure.

Picking stones or removing stone walls can be done where there is no snow.

It's not too early to start pruning the tree fruits.

The bush and bramble fruits can be pruned to advantage now as well as the grapes.

Are your strawberry plants heaving any? Better put on more mulch.

Japanese plum buds are now swelling; peaches are almost as bad. A temperature now as low as 25° F. may prove injurious. A coating of white-wash may possibly save an individual tree for you.

Moving Pictures to Feature 1924 Meetings

There are now many kinds of agricultural films accessible for many types of meetings and the Extension Service is now in a position to take advantage of these educational pictures through a recent purchase by the Essex County Agricultural School. This institution has bought a De Vry Portable Moving Picture machine, and also a Victor stereopticon machine. Either of these machines will be used whenever and wherever circumstances warrant it. While it is expected that the machines will be much in demand, their use will be restricted to educational programs only rather than entertainment and some arrangement may be made for a slight charge for the service.

VALUABLE BOOKS

Another set of the valuable New York State Publication on Apples, Grapes, Peaches, Plums, and Cherries has been acquired. These books together with several other volumes now in the possession of the library will be a nucleus around which it is intended to build a special Reference Library.

NATIONAL GRANGE AIM AND PLATFORM

The aim and platform of the National Grange for 1924 is:—"To improve the economic condition of the farmer."

FIRST by:—Supporting all sound methods for the orderly marketing and wise production of farm products.

SECOND by:—Reducing taxation—national, state and local.

THIRD by:—Urging strict law enforcement and respect for constituted authority.

FOURTH by:—Strengthening and building up the Grange throughout the nation.

FIFTH by:—Improving the social and educational opportunities and stimulating the patriotism and religious life of those who live in the open country.

ACTION

The Sixty-eighth Congress of the United States convened on December 3. It will be called upon to consider a great variety of important legislation, among which is the enactment of a law establishing a forest policy for the nation. No other legislation, new or pending, is more urgently needed or of more lasting importance to the welfare of the nation. Immediate action is imperative. Public sentiment favors it, but Congress will not act until public sentiment demands it. Now is the time to write your Senator and your Congressman and demand his support of constructive forest legislation. Write today and enlist your friends to do the same.

"GREEN AND WHITE"

Editorial Board

At a recent meeting of the Senior Class, Frank W. MacLaughlin of Gloucester, was chosen editor-in-chief of the "Green and White." Mr. MacLaughlin has selected the following editorial board:—

Assistant Editor: Miss Leslie Wagland, Methuen; Class Notes Editor: Willard Earley, Salem; Athletic Editor: Charles O'Keefe, Peabody; Alumni Editor: Edmund G. Plummer, Beverly; Exchange Editor: Hazel Eastman, Lynn; Joke Editor: Harold Wolfram, Marblehead; Business Manager: Guy Philpot, Beverly; Assistant Business Manager: Gladys Eastman, Lynn; Assistant Business Manager: Herbert Whittier, Ipswich; Class Artist: Carl Roberts, Newbury; Girls' Athletics: Gertrude Janes, Beverly; Faculty Adviser, George E. Gifford.

The mild winter weather has been especially convenient for club work and so far the regular monthly meetings have been uninterrupted by blocked roads, etc. The twenty-three poultry clubs are having good success and about thirty sewing and food clubs are under way.

HONOR ROLL—AGRICULTURAL DEPARTMENT

1st Term—1923-1924.

The close of the first term of school on November 19th finds a large number of students on the Honor Roll for excellency in scholarship. There are a number of new names on the list, the freshmen being represented by slightly more than one-fifth of their number. The showing made by the seniors is especially commendable, they having a total of 15 or 44% of their class on the roll.

While no one had a perfect record of 21 credits, five students came exceedingly close to it. The summary follows:

20-21 Credits—James F. Bradley, Gloucester; Frederick G. Kezer, Newburyport; Oliver E. Holmes, Swampscott; Parker Ryan, Swampscott; Andrew Coukos, Lynn.

19-20 Credits—Harry Lear, Lynn; Harold Porter, Middleton; Norman Morgan, Methuen; Harold Nickerson, Essex; Edmund Plummer, Beverly; Forrest Carter, Wakefield.

18-19 Credits—Charles O'Keefe, Peabody; Evan Roberts, Topsfield; Frank MacLaughlin, Gloucester; George Rippon, Lynn; George Constantinides, Lynn; Herbert Coulman, Lynn; Francis Eldridge, Georgetown; Arnold Oulton, Swampscott; Edwin Dodge, Hathorne; Henry Ellis, Wakefield; Brooks Dwyer, Bradford; John Sullivan, Salem; Philip Armitage, Lynn; Edwin Lombard, Ipswich; Hugh Reilly, Ipswich; William Hooper, Lynn; Aaron Porter, Beverly; Stuart Cogswell, Essex; Sidney Butler, Methuen; Aubrey Vaughan, Lynn; Ernest Robinson, Methuen; George C. Sewell, Lynn.

SCHOOL NOTES

The Poultry Club demonstration team consisting of Robert Sproull of Byfield, and Clifton Ober of Wenham, won third prize at the Boston Poultry show. These young men are members of the Freshman class and enthusiastic poultrymen.

On January 16, the Senior Citizen-school classes took a trip to Salem under the guidance of Instructors Gifford and Thurlow. Among the places visited were the City Hall, Essex Institute, Peabody Museum, County Commissioner's Office and the Courts.

The English division, IVA, gave a creditable demonstration of a school senate on January 8. Several important national and school topics were debated. Frederick Kezer of Newburyport, was declared to be the best speaker, Wilfred Jordan, second; Arnold Oulton, third; and Robert Dill, fourth.

Mr. Jack LaBelle is now an electrical apprentice at the General Electric Co. in Lynn, having been recently transferred by the Veteran's Bureau. While at this school, Mr. LaBelle made many friends who wish him success in his new work.

ALUMNI NOTES

Mr. E. A. Howard, Class 1918, who has been serving as instructor at the school, leaves February 9 to resume his work in Haverhill. Mr. Howard has charge of the agricultural work in the schools of Haverhill.

Burleigh Odiorne of Swampscott, is at the school for a period of two weeks, having been granted leave of absence from his duties at the Chelco Farm at Berlin, Mass.

Howard Barnes, Class of 1923, is now engaged on the A. C. Burrage place at Beverly Farms, where he is developing a poultry plant.

Alton Perkins of Lynn, is a student at the Eastern Nazarene College at Wollaston, Mass.

Alden Cressy of Beverly, is working at the Egg Laying Contest in Vineland, New Jersey.

Eric Bergstrom of Lynn, is taking a short course in Floriculture at the Mass. Agricultural College.

The following students are enrolled at the Connecticut Agricultural College, Storrs, Connecticut:

Wallis Moreland, Salem; Gardner Caverly, Ipswich; Donald Anderson, Lynn; Hugh Parkhurst, Gloucester.

James Skinner of Marblehead is now taking a post graduate course in Floriculture at this school.

POMONA GRANGE MEETING AT HATHORNE, FEBRUARY 20.

The February meeting of Pomona Grange will be held in the assembly hall of this school on the 20th of the month. The entertainment will be furnished by the school. The program will include selections by the Boys' and the Girls' Glee Clubs. A three-act play, entitled "The Three Pegs," will be presented by the High School Specials of the Home Making Department.

AGGIE TRACK TEAM LOST AT GLOUCESTER

In the third annual indoor track meet between the athletes of Gloucester High and Essex Aggies at the Gloucester Y. M. C. A. Saturday the home team lost by a score of 44 to 24.

OPEN LETTER TO THE ALUMNI

Hathorne, Mass.,
January 15, 1924.

Dear Friends of Essex Aggie:

On April first, Essex Aggie will have ready for sale the school publication known as the "Green & White". The formulating of this booklet each year is in charge of the senior class, who give considerable time in making the material within as interesting as possible for all who are, or have been, directly connected with the activities of the school. Because the publication is printed on fine quality paper, and because the school is quite young, it is necessary that we secure as many subscribers as possible that we may still retain the completeness of this book, and also give the publishing department an opportunity to enlarge the publication with each succeeding year. I believe that every member of the alumni should help, and I know that all of us will enjoy reading what the students are now doing at Aggie.

The "Green & White" will be ready for sale April first, but before we can guarantee you a copy of the book, we ask that you lend us your support to the extent of the price of one subscription. Send fifty cents now for your copy. Address the "Alumni Editor", E. C. A. S., Hathorne, Mass.

Yours for Essex Aggie,

ERNEST A. HOWARD,
President Alumni Association.

SUMMARY 1923 FOOTBALL SEASON

Essex Aggie enjoyed its biggest, happiest, most successful season in football history this year. Fine spirit was developed among the boys and a squad of twenty-six stayed by the guns throughout the season.

Twenty-nine boys participated in one or more games of a good reasonable schedule. Four games were won and five lost, although the last Methuen game was really a draw and should have been 0-0. The referee gave Methuen distance times enough to give them a touchdown they never won.

Played in all nine games: Ashton, Butler, Demeritt, Dowding, Dreano, Kochakian, McNichol, O'Keefe; in eight games: Jordan, Kezer, Leighton, Carl Roberts; in seven games: How, Hanson, Robinson, Skinner; in six games: Rippon and Veiner; in five games: Brown and Oulton; Reilly in four games; Drennan, Silva and Torrey, in three games; Lewis, Egerton, Whittier, Sewell, played in two games each, and Gowen played in one period.

The Assembly Committee plan to hold a joint assembly February 12. A patriotic speaking program is in preparation in which two senior teams will present essays on the lives of the two great Americans, Washington and Lincoln.

HOME MAKING DEPARTMENT.

On the afternoon of December 19th, the seniors of the Homemaking Department gave a Christmas entertainment in the general assembly hall of the main building, before the two departments.

Before the entertainment, the letters were given to the men of the football team, and ribbons were awarded to the winners in the Athletic meet which was held in November.

The program was as follows: Piano solo, Elizabeth Egerton, Beverly; reading, Evelyn Rice, Salem; vocal solo, Olive Blake, Rockport.

The seniors then presented two acts of The Bird's Christmas Carol. The first act showing Carol giving the invitation to the Christmas dinner to the Ruggleses, and the second act showing the family getting ready to accept the invitation. All the parts were well taken, and showed dramatic ability and hard work by the students, and thorough coaching by the instructors.

The cast was as follows:

ACT I.

Mrs. Bird, Blanche Atherton, Lynn; Carol Bird, Janet Dyer, Danvers; Elfreda (her nurse) Gladys Hulsman, Lynn; Uncle Bob, Eleanor Oulton, Swampscott.

ACT II.

Mrs. Ruggles, Hazel Eastman, Lynn; Sarah Maud, Leslie Wagland, Methuen; Peter, Frances Martin, Lynn; Peoria, Bertha Punchard, Peabody; Kitty, Evelyn Newhall, Lynn; Cornelius, Madeline Walker, Beverly; Clem, Lovilla Baxter, Newburyport; Larry, Gertrude Janes, Beverly; Stage Manager, Evelyn Sawyer, Danvers; Asst. Stage Manager, Charlotte Wright, Newburyport; Prompter, Mabelle Batchelder, Lynn.

Miss Brightman was coach, assisted by Miss Browne.

ATHLETICS.

The Girls' Basketball team has been carrying on their work successfully. This resulted in a victory of Friday, January 11. The team played the Beverly High School Girls at the Beverly Y. M. C. A. The line-up was as follows:

Essex	Beverly
E. Oulton, l. g.	Fitzgibbons, r. f.
F. Martin, l. f.	Brown, l. f.
L. Wagland, r. f.	Richards, c.
G. Janes, r. g.	Dube, s. c.
E. Carey, c.	Cology, r. g.
G. Hulsman, s. c.	Callely, r. g.
	Glavin, l. g.

The referee was Sydney Fields.

It was a close game but the girls showed a lot of "Aggie Grit" which made them win out.

At the end of the first quarter, the score was 2-1 for Beverly, the end of the half, it was tie 3-3, the third quar-



Girls' Basketball Team

ter, Essex had gained, and the final score was 12-8, in favor of Essex. F. Martin made three shots from the floor and one free throw. L. Wagland made two shots from the floor and one free throw.

Saturday, January 19, both the boys and girls team play the Punchard High teams at Andover, and we all wish for a victory.

The girls in the Homemaking Department are very proud of the new uniforms which have been purchased for the basketball team. Green and white are the school colors, and with black bloomers, white middies, and shoes, green stockings, ties, and head bands, the girls look attractive enough to compete with any team in Essex County.

The uniforms were bought at Filene's, and were on exhibition there during their exhibit of athletic goods in November.

Miss Ethel Brown, head of the Sewing Department, and Mrs. Abbie Clapp, instructor in sewing and millinery, spent Thursday, January 10, in visiting schools in Boston. In the forenoon they visited the High School of Practical Arts, in Roxbury, and spent the afternoon in the School of Domestic Science in Boston. They brought back many new ideas which will benefit the whole Sewing Department.

On Tuesday, January 15th, Miss Ruth Erickson, head of the Cooking Department, and Miss Harriette Hunting, instructor in Cookery and Household Science, visited schools in Boston and also spent some time at the Better Home Bureau, conducted by the Boston Herald.

SCHOOL EVENTS—PAST AND COMING

The Seniors are busy preparing for the annual Senior Dance, which is to be held on the evening of February 1st, and the Juniors are planning to hold the Junior Prom on February 21st.

A patriotic debate between the Agricultural and Homemaking Departments will take place some time in February.

The girls in the High School Special Class are preparing a play to be given some time in February and an Agricultural play will be given by the Senior boys in March.

The school had the privilege of listening to a very helpful and instructive talk by Rev. Garfield Morgan at a joint assembly on Tuesday morning, January 15th, also to Ex-Congressman Phelan on Friday morning, January 18th, on the subject "The Federal Farm Loan Act". We are looking forward to hearing Postmaster Frank C. Damon of Danvers some time in the near future.

In March it is hoped that we may have a speaker in some line of social or community work and in April Mr. Joseph N. Dummer will give the school the privilege of hearing his lecture "From Ocean to Ocean."

HOCKEY SCHEDULE

Jan. 8—Beverly at Hathorne.
Jan. 11—St. John's at Danvers.
Jan. 15—Open.
Jan. 18—Danvers at Hathorne.
Jan. 22—Ipswich at Ipswich.
Jan. 24—St. John's at Hathorne.
Jan. 29—Beverly at Beverly.
Feb. 1—Open.
Feb. 5—Open.
Feb. 8—Danvers at Danvers.
Feb. 12—Ipswich at Hathorne.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 5

HATHORNE, MASS., MARCH, 1924

No. 2

TENTH ANNUAL FARMERS' DAY

Wednesday, March 12, 1924.

PROGRAM

Meetings in Auditorium

- 10.30 Moving Pictures
11.00 Address: "Future of Agriculture in New England," by Herbert W. Collingwood, Editor, Rural New Yorker.
12.30-1.30 Lunch and noon recess.
1.30-2.15 "Better Apples and More Money for Massachusetts Fruit Growers," by Albert R. Jenks of West Acton.
2.15-3.00 "Brooding and Rearing of Chickens," by Prof. Roy Jones of Connecticut Agricultural College, Storrs, Conn.
3.00-3.45 "What is the Dairy Outlook?" by W. H. Bronson, Statistician, New England Milk Producers' Association.

Women's Section (conducted in the Homemaking Department Building)

- 1.30-2.00 "Clothes for the Homemaker," illustrated by stereopticon, Miss Marion P. Crawford, County Home Demonstration Agent.
2.00-2.45 "The Place of Food in the Housekeeping Budget," by "Marjorie Mills" of the Herald-Traveler Better Homes Bureau.

Features: Educational Displays of the Work of the School; Display of the Extension Work of the School; Educational Displays by Various Associations and Firms; Demonstrations by Students of Homemaking Department.

Trade Exhibits in large numbers, including a model kitchen, poultry accessories and supplies, spray equipment and apparatus, motor-driven machinery, and many other valuable trade and mechanical displays.

Notes Concerning Speakers

Mr. Collingwood, editor of the Rural New Yorker, is no stranger to Essex County audiences. He has appeared twice before on our program and is invited again as a result of numerous requests. Everyone should know the personality of the "Hope Farm" man.



Products of the School Shop

Albert R. Jenks is a practical fruit grower, operating a large fruit farm. As president of the Nashoba Fruit Company, he has worked out many problems for the benefit of their association. Working under exactly similar conditions to Essex County, his advice should be invaluable to progressive fruit men.

Professor Jones of Connecticut Agricultural College is an authority on efficient poultry management. Poultrymen of the county are fortunate in having again the opportunity to hear and question Professor Jones.

Mr. Bronson, the statistician of the New England Milk Producers' Association, has had a wide experience in dealing with the business problems connected with the handling and marketing of milk. By special request he is again to tell an Essex County audience of dairy farmers what he thinks of the present outlook in the dairy industry. This should be a valuable session.

In the Homemaking Section, Miss Crawford, with the ready co-operation of Wm. Filene's Sons Company, offers women an opportunity to take advantage of this vast amount of educational material which is now available and is being so much appreciated.

"Marjorie Mills" is the director of the Herald-Traveler Better Homes Bureau. All who are enjoying the pages in the Herald-Traveler conducted by "Marjorie Mills" will be glad to meet her and hear some of the interesting results of experiments carried on in her laboratory.

WHY A FARM SHOP?

This season the Mechanics Division of the School is carrying on a demonstration of the principle uses of the farm shop. We are trying to prove conclusively that the farmer needs a shop as much as he needs a wagon or any implement.

The picture above illustrates the three uses of the shop: First and most important, for repairs; second, for rebuilding or remodeling; third, for new building.

There is something on the farm to be repaired every day. If the shop is well equipped and handy, there need be but little delay in tightening up a bolt or putting in a nail before the team leaves for the day's work and this bit of foresight might save a heavy repair or replacement bill later.

In illustration of all the above, the Mechanics Division offers the above picture. The bobs of the sled were rebuilt by our students, (unskilled labor), in the school shop. We have no special equipment, only such tools as the average farmer could and should buy. The sled, cart, and gravel bodies were built new by the students. The repair jobs are not illustrated in the picture unless the shop building be considered. This was repaired and rebuilt by students. There are other repair jobs such as new floors for wagon bodies, new shaft for one horse wagons, metal work on various pieces of equipment and other things too numerous to mention.

The question of new equipment made in the farm shop is one each

(Continued on page 3)

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

A BI-MONTHLY PUBLICATION SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

Entered as second class matter, May 23, 1919, at the post office at Hathorne, Mass., under the act of August 24, 1912.

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CALENDAR

- March 7—Third term ends, Agricultural Department.
March 10—Fourth term opens, Agricultural Department.
March 12—Tenth Annual Farmers' Day at Hathorne.
May 2—Fourth term ends for agricultural students.
May 5—Summer project term begins.

FARMERS' DAY

With the present Farmers' Day, to be held Wednesday, March 12th, we commence the second decade of this event. The original conception was to make the School generally useful to the farmers and housewives of the region. The School has never attempted to furnish speakers on these programs simply for entertainment, but always for instruction. Every effort has been made to bring together a group of excellent speakers who are prepared to speak on timely subjects relating to agriculture and the household.

This year the corn show has been omitted. We have felt that the stimulation of the growing of field corn was not warranted. In its place, however, we hope to offer many other features of equal value.

As we commence this second series of Farmers' Day, it is well to pause and note some of the changes. During this time we have seen a great development in the use of motor-driven machinery. While the tractor has not yet become a regular piece of general farm equipment, its increased use has been gradual. Other applications of power on the farm have been numerous.

In passing, we would like to make note of the advent of the moving picture machine as a means of extending and disseminating useful information relating to agriculture and homemaking.

SUMMER PROJECTS

Students are rapidly making plans for their summer agricultural work. It is with great regret that we note the continued stress which is being placed upon summer remuneration rather than placing the emphasis on summer experience. Until parents and students recognize that more value should be given to the experience than to the compensation, the School will fail to realize the best results from its instruction. The School authorities would be very glad to take this matter up very fully with any interested parent.

FUTURE POSSIBILITIES OF WHITE PINE AS A FOREST CROP

White pine stumpage is rapidly increasing in value. In 1907 the average price of pine stumpage in New England was \$5.00 per thousand feet, while in 1923 stumpage for second growth white pine sold for from \$10.00 to \$12.00 per thousand feet.

Undoubtedly, this increase in value of pine stumpage will continue, especially since a large number of Southern mills which now supply a considerable portion of our timber will be closed within ten years, and we are rapidly approaching European conditions in our lumber supply where the last remaining stumpage of white pine is now being marketed at from \$40.00 to \$44.00 per thousand feet.

It is an alarming fact that we have less than fifty years' supply of standing timber left and are using it up about eight times as fast as it is being grown.

Large returns await the far-seeing estate owner who will now plant white pine on the waste and wornout sections of their farms.

The Federal Department of Agriculture has a blister rust specialist in Essex County with headquarters here at the School in the interest of pine owners.

WILLIAM T. ROOP,

Federal Agent White Pine Blister Rust Control.

THE SCHOOL POULTRY PLANT

During the past year rapid progress has been made in consolidating and rebuilding the School Poultry Plant. The work began a year ago and will be completed this coming summer.

The new laying house, 72 feet long and 24 feet wide, has been finished, a lot of over 450 pullets having been housed in it since last July. Up to the present the production of the birds has been fine and the many new features of the house have given much satisfaction to the designers of the building.

A permanent brooder house for early chicks, 50 feet long and 12 feet wide, was constructed and is now caring for 800 chicks. A grain room,

coal bins, running water, and a cold room for hardening off chicks are the special features.

Two (2) new 12x16 brooder houses have been built, and these, together with others owned by the division, give a full quota of colony and range houses for brooding and rearing chicks.

A new incubator cellar has been excavated, and the main poultry building moved from its old location westward from the boys' school, to cover the cellar. The old Amherst laying house adjoining was also moved to a corresponding location on the new site. In the main building upstairs, are quarters for the students who work on the plant. Downstairs will be a classroom ready for use next fall.

Between the main building and the laying house, and covering a 20-foot extension of the incubator cellar, has been erected an extension which houses, upstairs, a grain storage room. Downstairs are grain bins in the front. In the rear half will be a killing and fattening room with a cement floor.

The incubator cellar is modern in every way, with plenty of light and air. The front area, 30 feet, houses a new 3000-egg Newtown Mammoth Incubator, besides several oil-burning small machines. The rear section, 20 feet, and partitioned from the front section, contains the egg room, heating plant, coal bin, etc. A large double-doored bulkhead gives easy access from the outside.

This coming summer it is planned to move the Contest houses from their old location to a point adjoining the main plant and use them for breeding pens. A building for storing of poultry dressing will also be built.

A very large proportion of the work of remodeling the plant has been done by the students under the supervision of a mechanic and the instructors.

A valuable feature of the program this year is that the work of the plant is being done by the poultry students, who live at the plant for two weeks and who are supervised by an Advanced Poultry student, Morgan of Methuen. It is hoped to extend this feature another season, thus giving the students more valuable practice work.

The plant has at the present time, over 1000 layers, divided between Rhode Island Reds, Barred Rocks, and Leghorns. The basis of the Rhode Island Reds will be the famous Amherst strain of this breed.

The Trustees and Director of the School are making every effort to enable the instructors in charge of the Poultry Division to establish a plant that will be second to none in the country and equal to any school's establishment in the state.

ALBERT W. DOOLITTLE,
Poultry Instructor.

EXTENSION SERVICE

CAMPAIGN FOR BETTER APPLES Boost the Quality of Essex County Apples

The apple is often spoken of as the king of all fruits. Certainly this is true in Essex County, where the value of this crop alone amounts to nearly \$500,000 or about one-third of the entire value of all fruit produced in the county. It is hard to picture such a big farm enterprise as these figures represent, in a county so thickly populated as ours where nearly 1,000 people occupy every square mile of land, as compared with the state average of 480 per square mile. Nevertheless, reports show that such is the case and we rank third in the state in point of apple production, exceeded only by Middlesex and Worcester Counties.

Considering the importance of this crop and the fact that the greater part of it is marketed within the county, it seemed that the County Extension Service could render a real service by adopting a program which would have as its main objective the production of better apples. The need of paying more attention to the quality of this fruit is more apparent each year. Whenever there is an over supply of a commodity, whether it be apples or some other farm produce, one fact is always emphasized and that is, while poor produce often is hard to market and often proves a liability rather than an asset, products high in quality always find a steady demand.

"Grow apples that can be eaten in the dark," is our slogan, and to bring this about, a real campaign is now in progress. The campaign calls for the holding of pruning demonstration meetings, as well as other seasonal meetings to teach up-to-date fruit practices, the compilation of names and addresses of all apple growers, the enrollment of growers and demonstrators, the sending out of publicity material and circular news letters at frequent intervals, and in fact everything that will help in the production of quality apples.

Send to County Agent Tomlinson for information on pruning, spraying, fertilization of your orchard, and plan to attend the meetings held in your vicinity. Be a booster for Better County Apples!

BERTRAM TOMLINSON,
County Agent.

CHAMPIONS OF SUMMER CLUBS Close Competition in Two Contests Delay Decision

Assisting State Club Leader Howe in the work of choosing three county champions was the all-day task of

County Club Agent DeQuoy recently. The records were only part of the consideration, personal knowledge of the contestants also entering into the discussion. Here are the results.

Calf Club.

County Champion, Arthur Sevigny of Essex Aggie. The chief point in his favor was the fact that Arthur invested his own money in three calves and paid all the bills and assumed all the responsibilities of their care. As far as was in his power he managed well, the calves entering the pasture season in fine condition. Poor pasturage, and that was all he could get, was detrimental, but was not counted heavily against him. His accounts were excellent and his interest the same.

Reward—Amherst trip, 1 week, July 1924.

Garden Club.

County Champion, Haig Deporian of Methuen, 4th year member. Garden 9,731 square feet. Produced \$333.00 worth of vegetables at a cost of \$85.10. Peas, June 19th selling for \$4.00 a bushel and other equally early and profitable crops did the trick. Here is another hard worker who "got there".

Reward—Amherst trip, 1 week, July 1924.

Pig Club

County Champion, Earl Foster, North Andover. Had one pig cared for in very practical way and his pork made a price of 11.1 cents a pound.

Reward—Amherst trip, 1 week, July 1924.

STANLEY DEQUOY,
County Club Leader.

WHY A FARM SHOP?

(Continued from page 1)

man must answer for himself. There are without doubt, some pieces of new equipment that every farmer can make, such as whiffletrees, double-trees, wagon poles, stone boats, etc. The construction of sleds, wagon bodies, small buildings, etc., will depend upon his skill with tools. Remember, the more one uses the farm shop, the more skillful one becomes in the use of tools.

Come over Farmers' Day and see for yourself. All our farm operating equipment will be offered for inspection. We have one or two new pieces of equipment advancing ideas rather new or out of the ordinary, for this section of the country. Look them over and give us your opinion.

Let us talk over with you just what tools and equipment the farm shop should have.

FRANKLIN HAMMOND.

PROFITABLE FARM MANAGEMENT

The Type of Farming Must Conform to True Principles if it is to Yield a Good Living for the Farmer

Is beef farming a type of farming which belongs in New England?

We have dairying, poultry raising, fruit growing, and vegetable growing carried on by hundreds of farmers successfully. The fact that they are successful under the keen competition of, first, the cheaper production costs of the West, and second, the high wages of nearby industries shows that these types of farming are not out of place. These farmers are protected, of course, by the fact that the products which they market are either perishable or bulky or both and hence costly to ship long distances.

It is a recognized principle of Farm Economics that:—products which it is costly to ship (because of bulkiness or perishability) will be produced near market—those of a high value per pound may be shipped from a great distance.

The products which successful farmers are demonstrating as belonging to New England illustrate the first part of the above statement. "Play" farmers and other enthusiasts who are not doing it (successfully at least) are, by various forms of propaganda, saying that beef should be produced near market like fluid milk, when as a matter of fact the second part of the statement applies to beef. When shipped, as is the practice, alive or frozen or in refrigerator cars it is not very perishable—its high value per pound has been made to offset its perishability. It is shipped from Argentina to England, from Canada to Europe and from Kansas to Boston.

Is the fact that Connecticut eats \$100,000,000 worth of beef each year any proof that the farmers there would make a profit if they raised beef? The market is there but there are two factors which withhold them from raising beef animals, the competition of cheap forage and grain in the West, making profits very small or absent, and the competition of other enterprises as dairying or poultry, which will give greater profits.

The best evidence of all as to what types of farming belong in New England is the demonstration of the successful real farmers who show their understanding of true principles by carrying on the right types of farming in spite of plausible propaganda.

R. H. DENMAN.

HOME DEMONSTRATION AGENT

TOPSFIELD WOMEN STUDY KITCHEN IMPROVEMENT

Mrs. H. J. Haynes, State Specialist, Conducts Meetings

Mrs. Haynes, State Specialist in Home Management, is conducting a series of four meetings on Kitchen Improvements, in Topsfield.

As 80% of the home makers' time is spent in the kitchen, that room should be planned and equipped as an efficient work shop.

It has been shown that some home makers travel from 8 to 11 miles a day in performing the simple daily tasks.

Mrs. Haynes furnished several pedometers which members of the group are to wear. A comparison can thus be made of distance travelled before and after rearrangement of kitchen equipment.

Heights of working surfaces such as tables, sinks, and ironing boards have been discussed.

Three kitchens have been visited and scored, one scoring as high as 97%.

John's Lunch Box viz James' Lunch Box

John's—1 meat sandwich, 1 pickle, 1 doughnut, 1 piece of pie.

James'—1 bottle of milk, 2 molasses cookies, 1 entire wheat egg sandwich, 1 apple.

Which boy will be stupid and lazy in the afternoon and which will be wide awake and quick?

DOES THE EXTENSION DEPARTMENT EXTEND?

Answer—Twenty women in a millinery class in Lynn have passed on information to 70 others.

HOMEMAKING NOTES

The students in the Homemaking Department whose average in all studies was over 90% in the second quarter are as follows:

Hazel Eastman, Lynn.....	93.5
Olive Blake, Rockport.....	92.2
Gladys Hulsman, Lynn.....	91.7
Blanche Atherton, Lynn.....	91.1
Elizabeth Egerton, Beverly.....	90.7
Gertrude Smith, Methuen.....	90.6
Evelyn Rice, Salem.....	90.4
Leslie Wagland, Methuen.....	90.1

The instructors of the Homemaking Department are attending a course of lectures given by Miss Walker in the lecture room at Filene's.

This course consists of eight talks on clothing and are given on successive Saturday mornings in February



The Amesbury Exhibit

AMESBURY WOMEN HOLD SUCCESSFUL EXHIBIT

An interesting exhibit was given by the women of Amesbury on Friday, January 25, in the Amesbury High School. This was the result of instruction given to about seventy-five women by the County Clothing and Millinery specialists. A group from Saunders Hill contributed an exhibit in Millinery. About 150 people attended during the afternoon and evening.

Besides the dresses, aprons and hats shown there was an educational exhibit giving suggestions on care of clothing, selection of suitable line and color, and the use of the color scope.

Silhouettes were shown illustrating types of dresses worn during periods

from the early Greek and Roman days up to the present time.

Demonstrations were given during the afternoon and evening. A dress form was made, also attractive hat trimmings. Several women demonstrated the making of an apron, showing the most economical method of cutting from a pattern, the use of the binder, making bound button holes, and the set-in pocket.

Amesbury women acted as hostesses and served a luncheon to the out-of-town guests.

Amesbury may well be proud, not only of the workmanship shown, but of the fine spirit which has been manifested throughout the course.

MARION P. CRAWFORD,
Home Demonstration Agent.

and March. Color, line, and style of garments and accessories of clothing are clearly brought out and the course is proving a valuable one.

The attendance in the Homemaking Department has been very good during the first half of the school year. The following have not been absent or tardy up to January 31st.

Blanche Atherton, Lynn; Geraldine Boardman, Danvers; Margaret Greenleaf, Lynn; Marjorie Hawkes, Danvers; Hazel Henderson, South Lawrence; Gertrude Jones, Beverly; Frances Martin, Lynn; Dorothy Mattheson, South Lawrence; Lillian Pizzello, Beverly; Rae Reid, Georgetown; Evelyn Scobey, Danvers; Gertrude Smith, Methuen; Evelyn Rice, Salem; Janet Dyer, Danvers.

The Hygiene and Physiology classes are busy studying nutrition. All of the students have been weighed and normal weights studied, so that each girl knows whether she is over or underweight, and what foods she shall eat or avoid are being carefully discussed and correct diet planned.

The lecture recently given by Miss Foulitz of Mt. Vernon, New York, has resulted in an increased interest in home dyeing. The juniors are studying color and economy by doing some real practical dyeing in the School laboratory. New colors and combinations of colors, old clothes made to look like new, and careful training in matching colors add to the usefulness and attractiveness of this feature of the textile course.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 5

HATHORNE, MASS., MAY 1924

No. 3

THE SPRAYING OF FRUIT TREES

Spray Schedule for Apples Used at the School

Fruit trees are sprayed in order to control two general classes of orchard pests, insects and fungi.

There are two kinds of insects: (1) those that have a long tube-like mouthpiece, which is inserted through the bark. These live by sucking the sap and can be controlled by a contact spray, which stops up the respiratory pores of their bodies, thus causing death. Lime-sulphur, Bordeaux, Black Leaf 40, and miscible oils are the leading contact sprays. (2) The other kind of insects are those that have mouths equipped for chewing the foliage, which then passes into their stomachs. The chewers are controlled by a stomach poison such as Arsenate of Lead.

The fungi spread by means of spores. The best way of controlling them is to get a protective covering or coating of spray material on before the ripened spores are discharged from the old infected leaves or twigs. Lime sulphur is best for this purpose.

The spraying may be done while the tree is dormant, then it is most effective against the sucking insects, especially the scale insects, i. e. Oyster Shell and San Jose. A strong spray solution may be used at this time without danger to the buds.

Spraying while the tree is in foliage gives us effective control of the chewers, the young scales, and the fungi, but the spray solution must be fairly weak to prevent injury to the foliage.

A complete spray schedule for apples used by the Essex County Agricultural School Fruit Division will be found on page six of this issue.

WASHINGTON RUST PROOF ASPARAGUS

The vegetable garden division of the School has several thousand Washington Rust Proof Asparagus roots which can be purchased at \$1.80 per hundred or \$15 per thousand.

The plants are one year old and have come from selected stock and have made an especially fine growth. These strong one year old roots are best to set and this is a fine opportunity to secure good plants. Apply to Mr. Stowell, Vegetable Garden Division, Essex County Agricultural School.

Hathorne, Mass.



Beverly Canning Club Float

ENROLL NOW!

Make Application Early for Admission in September

The problem of "what shall I do" does not bother the boys and girls in the vocational schools. They are always doing worthwhile things and at the same time they are getting an education. After a few years of school, they easily find employment in the work for which they have been trained.

Every boy and girl of fourteen should consider the part they are to play in the work of the world. The vocation which seems to make a strong appeal should be carefully studied. What does it offer? Its advantages and disadvantages should be weighed carefully. After the decision has been made, see it through. Do not waver; do not quit. Success comes to the one who perseveres.

If you are interested in any branch of agriculture or homemaking, we would be glad to talk with you. This school offers a four-year course in agriculture and a three-year course in homemaking. There is a special course in homemaking covering a period of one year for high school graduates. A three-year course in agriculture is offered to more advanced students. Tuition is free to residents of Essex County. Now is the time to apply for admission.

DIRECTOR FRED A. SMITH,
Essex County Agricultural School.

CLUB WORK AT BEVERLY HEALTH CENTER

It Works Well as a Medium to Encourage Better Living

The Beverly Health Center is an organization which has found a very practical use for 4-H Club Work, the Junior Branch of Essex County's Extension Service. When Club Work first started in 1918, Beverly was interested and since then the work at the Health Center has grown rapidly until this year over one hundred girls are enrolled in the clothing, food, and big sister clubs. These girls have been meeting weekly at the Health Center this winter and their exhibit which terminates the season will take place at City Hall on May 17th.

This exhibit will be worth attending as it shows the practical value of the teachings of club work. This year there will be some sixth year club members exhibiting their work. Six seasons of work! It proves that club work is attractive to young people. Canning clubs are formed each summer at the Health Center and these clubs conform with the programs of the Health Center as it encourages the winter consumption of fruits and vegetables. The girls marched in a parade last fall at Beverly as a representation of Club Work at the Health Center. The girls, representing vege-

(Continued on page 5)

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

A BI-MONTHLY PUBLICATION SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

- May 20 Essex County Poultrymen's Association meeting at the School.
June 4 Parents' Day in the Home-making Department.
June 12 "Better Homes" Day, conducted by the Home Demonstration Agent, at the School.
July 29 Farm and Home Week.
Aug. 1 Massachusetts Agricultural College, Amherst, Mass.
Aug. 19 Union Pomona Field meeting at Hathorne. National Master Tabor, chief speaker.

OUR GREENHOUSE

Legislation authorizing the building and equipment of a greenhouse plant was passed by the Legislature of 1923, and duly signed by the Governor. With the final approval and signature of the majority of the County Commissioners, in the late fall of 1923, the greenhouse passed from a possibility to a certainty. Several other barriers have been removed.

The Trustees invited a representative committee of the leading gardeners and commercial greenhouse men to make a study and report. Specifications and plans were filed by five of the large greenhouse construction firms. The contract for supplying the actual greenhouse material and erecting the same, also the furnishing and installing of the heating equipment, has been awarded to the King Construction Company of North Tona-wanda, New York. The grading, building of foundations, establishing of the drainage, and other details connected with the installation of a modest, up-to-date plant will be undertaken by the School itself.

When the plan is completed, the School will have valuable buildings and equipment for teaching the varied lines of horticulture, notably vegetable

growing, raising of plants and cut flowers, propagation of tender and hardy plants, and also facilities for furnishing abundant material for the use of the science and other departments. It is hoped that the work will be largely completed in the early fall. Many students of the School are securing first-hand experience in the erection of this set of buildings. Future students will be fortunate in having this finely equipped outfit in which to gain their practical knowledge of horticulture.

THE BETTER APPLES CAMPAIGN

County Agricultural Agent Tomlinson of the Extension Staff of the School is conducting an aggressive campaign for the better care and cultivation of our orchards in Essex County and for the production, packing, and marketing of a better grade of apples. This is an effort which must meet a response from everyone who is seriously engaged in the production of this valuable fruit. Within the memory of most of our middle-aged citizens, two extended campaigns of orchard planting have been carried on. Waning interest, together with the advent of new and serious pests, have wrecked the hopes and incidentally the orchards on many of our farms. If this movement, now so happily undertaken at this time, can be carried forward with sufficient momentum and with enough organization and co-operation, the best of results may be expected. Essex County has a favorable climate and an admirable location, when we consider either domestic or foreign markets. Let everyone work together and in the establishment of high-grade orchard methods, let us expect to see a more valuable orchard output than the county has ever experienced before.

OUR POULTRY INDUSTRY

An agent of the State Department of Education, visiting projects of students connected with this School, reported that he found 35,825 chickens in their care. It would appear, with the rise of so many modern poultry farms, that in a very short time our county is destined to become prominent in this field of agricultural endeavor.

An old-time poultryman, commenting recently to the writer, expressed the idea that poultry raising had become so much standardized and such an intensive business that he felt it would be an occupation for some of the best-trained men. Men who will attempt to fit themselves by careful training for this business apparently have a fine remunerative business ahead of them. The School is particularly emphasizing the training of young poultrymen and is trying to exemplify thrifty, progressive methods in our own work here at the School Plant.

ESSEX AGGIE LOSES METHUEN TRACK MEET 52½ TO 19½

Only Six Aggie Boys Report to Coach Page

On Saturday, April 26th, Methuen High easily defeated Essex Aggie in the second dual meet between the two schools. Aggie was sorely crippled for lack of men in all the events, as only six loyal track men appeared for the contest. Five of these six entrants scored points and had all of the fifteen men appeared who signed up, the result would have been a different story. Six men never did make a track team and of course they were handicapped from the start, especially against a big team like Methuen High.

Sontag was the star of the meet, winning three events and one second place, scoring 18 points. Captain Whittier and Sargent scored six points apiece for Essex with Coukos closely behind; he scored 5½ points.

It's not often that the mile and half-mile runs are the most thrilling events of a track meet but such was the case at Methuen. Wade of Methuen took a commanding lead in the mile from the start with Whittier and Sargent trailing about one-third of a lap. These positions were held until the middle of the seventh lap when Whittier started to close in. Sargent was pressing him hard and they gradually closed in on Wade in the last lap, but he, too, sprinted at the finish just as Whittier uncorked a wonderful burst of speed. He finished half a yard behind Wade but was still fresh. Whittier would unquestionably have won the mile, had he started to close in Wade's big lead in the sixth lap.

The half mile was a race between Sargent and Whittier; both boys were determined not to make the mistake of waiting too long again. Sargent took the lead in the first lap and Whittier passed him in the second. Sargent again took the lead in the third lap to lose it again in the fourth. Both sprinted down the home stretch with Whittier in the lead and the race apparently won. Five yards from the finish Sargent let loose and lead Whittier by a scant foot at the tape.

Coukos broke the School record in the shot put with a beautiful heave of 36 ft. 1½ in.

Methuen won all three places in the hundred. Tucker had third place easily until he lost the course in mistaking the finish line.

Coukos only tied for third in the high jump. Austin won a third in the quarter mile and Tucker a third in the 222-yard dash.

Methuen got all three places in the broad, Sontag breaking their record with a beautiful leap of 19 ft. 10 in.

O'Keefe showed a fine bit of loyalty and school spirit by coming way up

(Continued on page 6)

COUNTY AGRICULTURAL AGENT

HOW TO CANDLE EGGS

An Art Every Poultryman Should Know

Contrary to a common belief, all fresh eggs are not good eggs and when one gets a bad fresh egg mixed in with some good ones, no amount of explaining will convince the average customer that said bad egg was nothing but an "incubator" egg. The chances are ten to one that the customer is lost and all because the eggs were not carefully candled before being placed on the market.

To candle eggs all that is needed for equipment is a tight box in which is inserted an electric bulb, so arranged as to come directly opposite a hole, which should be about 1 1/4 inches in diameter. Those handling a large number of eggs would probably find one of the manufactured candlers more convenient and substantial.

Candling is done with both hands, one egg at a time placed before the light and turning it quickly to observe size of the air space, condition of the shell, density of the yolk, wateriness of the white, presence or absence of blood spot, blood rings, mould spots or rotten condition. The weight of the egg is determined by handling, but if in doubt, a small egg scale can be used.

"Extension Bulletin No. 120" published by Purdue University describes the various kinds of eggs as they appear before the candle as follows:

Fresh—Air cell small, about the size of a dime or 3/10 of an inch in depth. The body is full and firm, and albumen viscous. The yolk moves but slightly when the egg is turned before the candle, is dimly visible, and free from spots and effects of heat or cold. In white eggs the yolk shows more plainly than in brown-shelled eggs.

Heated—The yolk is very dark and easily defined; air cell may be one-fourth inch in depth if the egg is also stale.

Stale—Air cells vary in depth from one-fourth to one-half inch, showing the evaporation. Body weak and watery, yolk is unbroken but very mobile. If also heated, the yolk is clearly defined.

Cracked—Fine white lines show where the shell has been cracked but the membrane is unbroken.

Live Germ—The germ spots show black on the yolk and the fine blood vessels radiating from it show red.

Blood Ring—The germ is dead and the blood is concentrated in a ring on or around the yolk.

Spot—A black spot on the yolk due to a dead germ, mould, or piece of blood clot from the ovary of the hen.

Mouldy—Black spots, singly or in groups, near the place where a shell has been broken.

Stuck Yolks—The yolk is apparently stuck to the shell. A rapid twisting of the egg does not permit the yolk to go free. It is unfit for food.

Black Rot—The egg appears partially or totally black.

POULTRYMEN TO MEET MAY 20th AT AGRICULTURAL SCHOOL

The third regular meeting of the County Poultry Association will take place May 20th at the Agricultural School, Hathorne. The meeting will start at 1:30 P. M. with Professor J. C. Graham from the Massachusetts Agricultural College, the chief speaker. His address will cover the "Care and Management of the Growing Stock." This topic should be of vital interest to all poultrymen of Essex County and everyone is invited to attend.

WHAT QUALITY DOES

The average per capita consumption of eggs in the United States was 14.6 dozen in 1920, 16.5 dozen in 1921, 16.9 dozen in 1922 and 18.6 dozen in 1923. This is an increase of 4 dozen eggs in the four-year period and is directly traceable to the great improvement in the quality of eggs on the market.

FRUIT GROWERS MAY ORGANIZE

As a result of the interest shown at the various meetings held in connection with the campaign for better apples, some of the leading fruit growers have expressed a desire to formulate a county organization, which shall have as its main objective the encouragement of better fellowship among fruit growers and to develop the industry by any united action that may seem advisable. This whole matter will be discussed and action taken at the county field meeting for fruit growers to be held May 6th, 2 P. M., at the farm of George Averill, West Andover. Mr. Averill's farm is located near the Grange Hall.

FARM AND HOME WEEK
MASSACHUSETTS
AGRICULTURAL COLLEGE
AMHERST, MASS.
JULY 29—AUG. 1, INC.

NEARLY 10,000 APPLE TREES REGISTERED IN "BETTER APPLES" CAMPAIGN

Boost the Quality of Essex County Apples

When we realize that the enrollment cards received at the office of the County Agent show that nearly 10,000 trees are scheduled to receive some sort of an approved orchard practice, we can get some idea as to the popularity of the campaign to "grow apples that can be eaten in the dark."

The first stage of the campaign has been concluded. From January 1st to April 15th, a concentrated effort was made to get trees properly pruned. To bring this about, 21 demonstrations were held in the following towns: Andover, North Andover, Haverhill, Georgetown, Groveland, Merrimac, Amesbury, Salisbury, Newbury, Ipswich, Danvers, Methuen, Saugus, West Peabody, Wenham, Rowley and Boxford. Over two hundred fruit growers were reached by these meetings.

In addition to this the County Agent has mailed to each of the six hundred apple growers listed at this office five editions of the circular entitled "Better Essex County Apples." This circular is being edited for use in connection with the campaign and aims to give timely orchard suggestions in such a manner as can be readily used. For example the last edition (Circular No. 5) showed an enlarged picture of an apple bud as it looks when it is time for the "delayed dormant" spray. The various sprays recommended must, to be effective, be applied at the right time. Exact dates cannot be given, owing to the differences in development from one year to another and also differences in development that are due to the variety of apples. It is planned to continue showing these enlarged views of apple buds and blossoms so that a grower may tell at a glance by comparing the illustrations with the buds and blossoms in the orchard just when to apply the spray in order to secure the best results.

The following summary compiled from the registration cards shows the progress of the campaign to date.

No. apple growers registering.	42
No. lbs. nitrate to be used.....	12,800
No. trees to have nitrate.....	4,689
No. trees to be pruned.....	5,648
No. trees to have dormant spray	5,648
No. trees to have pink spray...	6,740
No. trees to have calyx spray.	6,849
No. trees to have special scab spray	3,178

HOME DEMONSTRATION AGENT

BETTER HOMES MEETING WHEN

June 12th
10:30 A. M.—4 P. M.

WHERE

Essex County
Agricultural School

WHO

All women of
Essex County

All women of Essex County interested in Extension Work are invited to come to the Agricultural School on Wednesday, June 12th.

A "Better Homes" program is being planned. Miss Ruth Axtell Chalmers of the Priscilla Proving Plant will be one of the speakers. Mrs. Helen D. Lane, Clothing Specialist of Worcester County will give her illustrated lecture on the "Magic Dye-pot." We hope to use our new moving picture machine to show films of popular household subjects. The women of Rowley have prepared an original play describing the work they have been doing in Clothing and Home Management.

There will be an exhibit showing work done by the women of the county under the direction of the Extension Department. Invite your neighbors, bring your lunch and come and have a good time. Remember the date, June 12th.

STATE CLOTHING SPECIALIST TALK ON "CARE OF CLOTHING"

Lynn Lincoln School May 9th
Miss Marion L. Tucker, State Clothing Specialist of the Massachusetts Agricultural College, will give a talk on "Care of Clothing" in the Lincoln School, West Lynn, on Friday, May 9th, at 2 P. M.

The meeting will be under the auspices of the Myrtle Parent-Teachers' Association and is free to all.

This is an interesting subject to all women and those who have heard Miss Tucker will not want to miss the opportunity of hearing her again.

DO YOU NEED A SPRING TONIC?

Eat More Greens

Don't go to the drug store for your spring tonic. Nature will give it to you free.

Eat greens at least once a day—better twice.

Spinach and carrots will give you a good amount of iron, also dandelions and salad plants.

Cabbage and onions are rich in sulphur and phosphorus. Asparagus not only supplies salts but stimulates the kidneys. Raw vegetables are very nutritious. Soon the wild greens will be in season and cress, cowslip, lamb's quarters, curly dock and dandelions may be had for the picking.

If you want a delicious spring dish of greens, try cooking together the tender leaves of horse radish, mullen and milkweed. Be sure and cook your greens in as little water as possible. Save the water and make a cream soup of it or use with meat stock.

If greens are not popular with your family, try some of the following suggestions:

Cabbage and pineapple salad. Chop cabbage and let stand for an hour or more in pineapple juice. Then add shredded pineapple. Serve with salad dressing on lettuce. Pimento may be added to give color and flavor.

Vegetable Salad. Put 1 cup of crisp, raw cabbage and 1/3 cup of raw carrot through food chopper. Mix with your favorite salad dressing and serve on lettuce. 1/2 cup chopped celery may be added.

Creamed Spinach. Cook in as little water as possible, 1/2 peck spinach. If liked add a slice of a small onion when cooking. Drain and chop very fine. Make 1 cup of white sauce, using 1 cup milk to melted butter and 1 tablespoon of flour, (1/2 cup spinach water may replace 1/2 cup milk.) Fold into white sauce a well beaten egg and pour over spinach. Simmer for a moment. Season. This dish may be made very attractive by spreading over top of spinach a yolk of hard boiled egg pressed through a ricer.

A HOME CANNING FACTORY

Mrs. Arthur L. Usher of Andover St., Danvers, has made a reputation for herself as well as a financial success in the sale of home-canned meat, fruits and vegetables.

In our next issue Mrs. Usher will tell how she made a success of her home-canning factory.

PASTE THIS IN YOUR COOK BOOK

To serve 50 people: Mashed potato, 1 pk. potatoes; oysters, 6 qts.; biscuits, 3 qts. flour; cocoa, 1 1/2 c. cocoa and 1 1/2 qts. water, 8 qts. milk.

Coffee, 2 c. ground coffee to 1 gal. of water. 1 lb. coffee will serve 40 people. Whipped cream, 1 pt. will serve 40 people. Punch, 1 gal. will serve 20 people. Roasts, 1/2 lb. per person. Fowl, 1/2 lb. per person. Boiled Ham, 1/3 lb. per person. Vegetables creamed, 1/3 c. of milk per person, 1/3 c. vegetables per person.

FOOD PRESERVATION

Professor Cole Conducts Second Meeting

Professor Wm. R. Cole of the Massachusetts Agricultural College conducted his second meeting in Food Preservation at the Agricultural School, April 28th and at Fox School, Haverhill, April 29th. Greens, rhubarb and beans were canned.

The women receiving instruction from Professor Cole at these meetings are ready to pass on information to their neighbors and will be glad to supply mailing bulletins upon request. If you want help, communicate with any one of the following:

Mrs. Grace Foote, Lynnfield.
Mrs. Orrin Pettingill, Middleton.
Mrs. Carlton M. Stearns, Danvers.
Mrs. Emma Poor, West Peabody.
Mrs. Ross Coon, Saugus.
Mrs. Lilla Haynes, Haverhill.
Mrs. James Holmes, West Newbury.
Mrs. Margaret Manning, Amesbury.
Miss Grace Robinson, No. Andover.

HOUSEHOLD ACCOUNTS IN SAUGUS

Ever since the beginning of Extension Service, Saugus Center has taken advantage of the opportunities it offered.

Now the women of Saugus are the first to hold a series of meetings for the purpose of studying Household Accounts.

Thirteen women have pledged themselves to keep their household accounts for a definite period in order that they may systematize their household budget.

The necessity of conducting the home finances on a business basis, money and labor income have been discussed and a division of income made. The food subject proved to be a most vital one and brought out an interesting discussion.

Statistics show that the average amount spent per person per month is \$10 to \$15.

In 1923 the minimum cost per person was \$.50 per day. A family of 5 persons required a minimum food cost of \$15 a week.

Out of \$1 spent for food
For meat, fish, eggs.....\$.17 \$.22
For milk and cheese......20 .30
For cereals, bread......20 .30
For fats and sugar......12 .15

Suggestions for reducing food costs and quantity buying were given.

At the next meeting May 16th, Shelter and Clothing will be considered. If you are interested in your family finances, come and share your experiences with your neighbor.

COUNTY CLUB AGENT

COUNTY CLUB AGENT

The Half-Way Season with Club Work Winter Work is Ending and Spring Clubs Starting

The 4-H Clubs that have been enjoying the work these past few months are now on the home stretch. The Sewing and Food Clubs will be all over by June 1st and exhibit dates are now being arranged. These exhibits are interesting affairs. The spirit of competition is encouraged as an incentive to a large percentage of completion and a high quality and large quantity of work done. Prize cards are given the members doing the best work exhibited. No money prizes are offered and this reduces expense and discourages cheating.

The work will be judged as far as possible by Miss Murdock, Assistant State Leader. Miss Murdock is always welcomed by club members and leaders. She is a good judge and is able to make quick work of exhibits, thus enabling her to visit many sections in the few days she allows Essex County. Miss Murdock judges dozens and dozens of exhibits around the State and so, by visiting us, she is able to compare the work here with that in other counties.

Some idea of the extent to which sewing and food club work is being done is given in the following birdseye view of Essex County, the town, its leader and number enrolled being given.

Andover, Mrs. Derrah, 31; Beverly, Miss Parker, Miss Walker*, 100; Boxford, Miss Manning, 6; Byfield, Mrs. Noyes, 6; Danvers, Miss Gates, 9; Essex, Mrs. Mills, 10; Essex, Miss Putnam, 6; Gloucester, Miss Rundquist, 16; Groveland, Miss Rowell*, 9; Lynn, Miss Eastman*, 13; Lynnfield, Miss Rich, 8; Manchester, Miss Parker, 21; Merrimac, Miss Noble Mrs. Tabor 12; Methuen, Miss Landry, 15; Methuen, Miss Smith, 7; Newburyport, Miss Garland*, 8; North Andover, Miss Jones, Miss Doane, Miss Whitman, 40; North Andover, Principal Kimball School, 6; Peabody, Miss Coleman*, 6; Rowley, Mrs. Huse, Miss Thompson, 11; Salisbury Miss Titcomb, 9; So. Groveland, Mrs. Buckley, 13; Topsfield, Miss Bousley*, 34; West Newbury, Mrs. Christie, 9.

This means that in a county of 34 cities and towns, there are 21 where clubs of five or more members are organized for food or clothing work. Twenty-eight volunteer leaders are carrying on the work. Those marked * are graduates or students of the Homemaking Department at Essex Aggie. The enrollment in these clubs

totals 405 girls. Persons living in the above towns should make sure to visit the exhibit and see what can be accomplished by youngsters.

The spring clubs are being organized. These are made up of garden, canning and small fruit club members. The enrollment work is completed and the first clubs to be organized are Newburyport, Danvers, Tapley School and Wadsworth School, Middleton and West Peabody. The outlook for garden work is better than last season and a profitable season is anticipated.

CLUB WORK HELPS AGGIE

Many Members Learn of School Through Agent

The policy of County Club Agent DeQuoy regarding Essex Aggie has been to influence every club member possible to enroll at that institution. Club Work is fine for creating interest and enthusiasm in agriculture and homemaking. It is capable of giving interested members a simple knowledge of how to do these things. It even gives a fair knowledge of the underlying "whys" of these operations. But Essex Aggie is equipped to give practical instruction in both agriculture and homemaking and therefore is better able to prepare the boys and girls in these vocations. Club work cannot do what Essex Aggie can do and Essex Aggie cannot take the place of club work. Club work finds the young people who are inclined toward farming and homemaking. It proves them through the requirements of the project. Then Essex Aggie has a ground already broken and ready to work if the club members who have proved efficient can be interested in the school. There are at present a great many ex-club members at Essex Aggie and more will come in this fall.

When we start each day with the firm, quiet resolution to perform, to the best of our ability, all the duties that come, we find ourselves ascending the social scale of life, and on the way to bigger and better things.

No matter where a man's lot may be cast, what his education may be, nor even what his religious beliefs are, if he is meeting life courageously and sincerely, his welfare is assured.

Those who bring sunshine into the lives of others, cannot keep it from themselves.—J. M. Barrie.

GRANGE HELPS CLUB WORK

Salisbury Votes Money for Cup as Prize

Salisbury Grange has taken an active interest in 4-H Garden Club Work in their town. At a recent meeting County Club Agent DeQuoy told the story of club work to the Grange and made an appeal for definite help for the work in Salisbury. As a result the Grangers voted to buy a cup to be given the boy or girl doing the best garden work.

Although interest among the boys has been poor, it is hoped that the prize may arouse their interest and at least a dozen good gardens should result.

"4-H CLOVER LEAVES"

We Want Volunteer Canning Club Leaders!

Hot Work, No Pay, Many Thanks! Will You Help?

Garden Club Interest Increases.

Canning Clubs Still on the Decline.

We Are Still Eating.

Though the War is Over!

Canning Conserves Cash and Crops!

Encourage It by Leading a Club!

Especially in County Towns.

Write County Club Agent, Hathorne, Mass.

No More Pig Clubs.

We Are Trying Small Fruit Clubs.

Four Essex Aggie Girls Lead Clothing Clubs This Winter.

Helping Others Helps Yourself.

Mr. Carleton M. Stearns, instructor in Vegetable Gardening, who was severely injured at the School Garden on April 26th, is rapidly recovering from the effects of his unfortunate accident. Mr. Stearns, while working about the frames, accidentally fell through one of the sash and was severely cut on the left arm and hand. He was given first aid by Dr. Buck of Danvers and then taken to Beverly hospital. His many friends will be glad to learn of his complete recovery.

CLUB WORK AT BEVERLY HEALTH CENTER

(Continued from page 1)

tables, wore costumes colored to represent leaves and roots. Those with the white aprons and holding fruit jars represented canning club members. The above illustration shows how the young ladies appeared in the parade.

SPRAY SCHEDULE FOR APPLES

As used at the Essex County Agricultural School

Time of Application	Material Used	Enemy	Remarks
(1) Delayed Dormant. Early spring as buds are breaking.	Lime-sulphur, 6 gal. in 50. 40% nicotine sulphate 3/8 pint.	Aphis, San Jose Scale, Blister Mite.	This spray has very largely superseded the dormant application.
(2) Pre-Pink. Before the clusters of blossom buds separate.	Lime-sulphur, 1 gal. in 50.	Apple Scab.	Used on McIntosh and other varieties subject to scab. Very effective.
(3) Blossom-Pink. As blossom buds begin to show pink.	Lime-sulphur, 1 gal. in 50. Arsenate of lead paste 3 lbs.; powder 1 1/2 lbs. Nicotine sulphate 1/2 pint.	Red Bug, Scab, Curculio, Aphis, Tent Caterpillar, Bud Moth, Tail Moth, Gypsy Moth, Canker Worm.	In areas where the gypsy moth is troublesome, the amount of arsenate should be doubled.
(4) Calyx. When last of petals are falling.	Same as (3).	Codling Moth, Scab, Curculio, Red Bug, Aphis, Gypsy Moth, Sooty Fungus.	Generally regarded as the most important single spray.
(5) 3 or 4 weeks after Calyx Spray.	Same of calyx spray, except no nicotine sulphate.	Same as calyx except Red Bug and Aphis.	
(6) Last of July.	Liquid lime-sulphur, 1 gal. in 50. Arsenate of lead powder, 1 1/2 lbs., paste 3 lbs.	Sooty Fungus, Scab.	If second brood of codling moth are not present, omit the lead.
(7) Middle of August into September.	Same as (6).	Sooty Fungus, Scab.	Used on McIntosh and other varieties especially subject to sooty fungus if moist foggy weather continues.

NOTES

1. Special Spray: The following special spray is sometimes applied in addition to those listed above: (1) Where plum curculio is serious on apples, a spray of arsenate of lead, usual strength, is applied a week or ten days after the calyx spray.

2. Bordeaux mixture is being used somewhat for the pre-pink and pink sprays on the theory

that it is more effective than lime-sulphur. It does not appear to russet the fruit appreciably if used at these times.

3. Dry lime-sulphur has not been used extensively by New England orchardists. It costs more per gallon of spray and some brands do not thoroughly dissolve, which leaves a residue that wears out nozzles.

4. Dusting is quite commonly used, instead of spraying, in parts of Maine and Nova Scotia but has not been used extensively in north-eastern United States because (a) the lack of definite information concerning methods and materials, and (b) the failure of the dust to control all of the pests, necessitating two outfits.

MY PET KITCHEN CONVENIENCES

Have you linoleum on the floor? If not, strain every nerve to accomplish it. I can wash it immaculately in fifteen minutes. Some authorities recommend waxing it. And while on the subject of linoleum, unless you have one of the excellent enameled-top kitchen tables, have light-colored linoleum applied to your table. This is a tremendous convenience. Shelves around the sink and in the kitchen pantry should receive a coat of varnish or oil.

Have you in your home a white elephant in the way of a small marble-topped table, purchased in what is now referred to as "that awful period"—too gingerbreadly at the base to make it presentable? We had, and I finally decided to have the base chopped for kindling wood and to establish the marble top in the kitchen pantry, where it proved invaluable as a molding board for pastry, bread, cookies and the like. I should find it hard to get along without it now.

As a part of the kitchen furniture include a high stool or chair to use when ironing, preparing vegetables and rolling cookies and so forth. This also is invaluable.

Over the sink place a row of neat hooks. On these should hang a dipper, egg beater, large spoon, a good-sized

strainer and also a small strainer. There should be a pair of stout kitchen scissors—never to be taken from the room—for cutting not only paper and string, but for mincing parsley, shredding lettuce or dried beef. Back of some pipe should hang a couple of sharp vegetable knives, a fork and a split clothespin. Why the clothespin? Try it as a scraper when something has stuck on your pet aluminum or granite saucepan and you will never be without it again. The dish mop should hang in the airiest corner. These I regard as kitchen essentials—for me.

FLORENCE TAFT EATON,
In The Country Gentleman.

METHUEN TRACK MEET

(Continued from page 2)

from Newton to help out the team. We need more of that brand of sportsmanship.

The Aggie team was seriously handicapped by not having spikes. The field was heavy and considerable slipping was apparent in nearly every event, but particularly so in the high jump and sprints.

These six boys won merited praise from the Methuen fans for their fine sportsmanship. Certainly they deserve full credit from the School for their spirit and genuine loyalty.

ALUMNI ADDRESSES

We are always glad to hear from our graduates. With an ever-increasing number it becomes more and more difficult to keep our address file correct. We have recently received letters from the following graduates of the Agricultural Department:

Philip Peabody, Box 164, Lapeer, Michigan.

James L. Rogers, Monstweag Farm, Wiscasset, Maine.

Philip A. Lee, Waldboro, Maine.
Elbridge Allen, 8 Bailey St., Lynn, Mass.

Walter Knowlton, Pleasant St., Wenham, Mass.

Burleigh Odiorne, Chedco Farm, Berlin, Mass.

Wendell R. Murray, Dairy Dept., M. A. C., Amherst, Mass.

Alden F. Cressy, Egg-Laying Contest, Vineland, N. J.

Everett L. Hall, Center Strafford, N. H.

Harold H. Henderson, West Newbury, Mass.

Albert Ravell, 127 Mt. Auburn St., Watertown, Mass.

George Garland, Prospect Hill Rd., Andover, Mass.

Fred Morris, Wild Acres, E. Greenwich, R. I.

James R. Lord, Broad View Farm, Rochester, N. H.

Herman Herrick, Maudsleigh Farm, Newburyport, Mass.

HOMEMAKING DEPARTMENT

Wednesday, June 4, is the day set for the annual Parents' Day at the Homemaking Department of the School. This is the day on which the students entertain their parents and friends and invite them to inspect some of the work done during the year.

On Wednesday afternoon, April 23rd, the Junior class under the supervision of Miss Brightman and Miss Breed visited the House of Seven Gables, Essex Institute, and the Pierce-Nichols House in Salem. The trip proved to be very interesting and instructive and was greatly enjoyed by the whole group.

On Tuesday, May 6th, the Junior and High School Special classes visited the Lowell Textile School. This trip is a part of the Textile Course and the students received most courteous instruction in spinning and weaving from an instructor of the Textile School.

The school play, "The Three Pegs" was given at the Crombie Street church, Salem, under the auspices of the church choir on April 22d, and at St. Peter's Episcopal Parish House in Beverly on April 24th. On both occasions the parts were well taken and the audience was interested and appreciative. A goodly sum was realized, which will add materially to the treasury of the Essex Aggie Athletic Association.

The third quarter of the school year at the Homemaking Department ended on April 25th and the reports show an improvement along all lines of work. Many of the students are already planning their summer projects and the Senior Class girls are considering the work which will be theirs in the future. Several are to enter hospitals in the fall to train for nursing, some will take up commercial sewing, some millinery, and a few will be home-makers. Still others plan to attend some higher institutions of learning.

On May 16, the Seniors and the High School Special class will visit Faneuil Hall Market and go through Arthur E. Dorr's wholesale and retail department. A meat cutting demonstration has been arranged and a complete explanation of the various cuts will be given.

In the afternoon, the classes will visit Walter Baker's chocolate factory and be instructed in the many processes involved in the making of the finished cocoa and chocolate products.



High School Special Class in Home Dyeing.

TEXTILES

The work in Textiles has proven to be especially interesting this year. To the regular course in Textiles, which includes the study of the different fibres, has been added the study of "Color" and "Dyeing."

In the course on "Dyeing," posters were first made. For these posters interesting colored pictures were chosen and four of the most prominent colors in each picture selected. Pieces of cloth were then dyed to match these colors, and finally the colored samples and pictures were mounted. The posters were made in order to give the girls practice in preparing the dye solution and dye bath, and to make them familiar with the general process of dyeing, also to give them confidence in combining two or more standard colors and obtain any desired shade.

Having had this experience in plain dyeing, the girls were more competent to dye the dresses, skirts, or blouses which they brought from home for this purpose. Inexpensive curtains were also dyed.

Another problem was "Tie-Dyeing." Scarfs were tie-dyed. Now, when scarfs are so popular, this project proved to be profitable as well as interesting. New material was not necessary. A discarded pongee skirt furnished one girl with material for three good scarfs. A faded silk scarf, sixteen years old, when tie-dyed became beautiful and serviceable again.

What are the different colors, and which are the prevailing ones for this season? Why is it that a certain color may be becoming to another person. The complexion, hair and eyes, and size determine whether a color is suitable or not for a person. This is the subject we are considering at present and before we leave this subject, each

girl will understand what colors she may or may not wear; as well as the colors that are suited to other types.

With our work on Color and Dyeing, the fundamentals of Textiles have not been neglected. The characteristics, tests and uses of the cotton, linen, silk, and wool fibres have been studied. Standard materials and some novelty materials made from these fibres have also been studied and examined.

As a part of the Textile course, a visit to the Lowell Textile School is planned so that the various processes in the preparation of the thread and the weaving of the cloth may be made clearer.

SCHOOL LIBRARY REORGANIZED

Miss Pamela F. Robbins of Falmouth, Mass., has about completed the work of reorganizing the School library. Miss Robbins has had a wide experience in library work and is supplied by the Division of Public Libraries of the Massachusetts State Board of Education. In addition to a complete reorganization of the book material, Miss Robbins has installed a new system of filing agricultural pamphlets and bulletins. The library is now in excellent shape and will be in charge of the School Librarian, Miss Alice Ober of Wenham.

THE AIM OF THE HOMEMAKER

Miss Lita Bane of Illinois

To have the Home:

Economically sound,
Mechanically convenient,
Physically healthful,
Morally wholesome,
Artistically satisfying,
Mentally stimulating,
Socially responsible,
Spiritually inspiring,
Founded upon mutual affection and respect.

AGRICULTURAL DEPARTMENT

STUDENT PROJECTS NOW IN FULL SWING

Summer Term Starts Off Well

The last week of April saw practically 100% of the student body from the Agricultural School engaged in active agricultural work. The scope, variety, and opportunities to obtain skill in various fields of agriculture offered by this year's projects compares favorably with those of other years. Let us note a few from the long list.

The School Farm will be manned by a crew of twenty-five students who



are assigned to various divisions of the farm for project experience, depending on the agricultural subjects studied during the previous year in the classroom. Kenneth Harnden, '24, of Saugus, is school teamster; Richard Ashton, '25, of Salem, the herdsman; while Aubrey Vaughan, '26, and Arthur Wentworth, '26, both of Lynn are assigned to the Farm division also. James Curran '24, of Danvers is student foreman of the market garden and will have a crew of seven or eight younger students working with him.

A recent round of some of the poultry projects revealed a total of between 33,000 and 34,000 chickens being raised and cared for by students of the School. Franklin Livermore, '25, of Lynn is caring for a flock of 14,000 at Edgewood Farm, North Andover, while Chester Hansen, '25, of Beverly, at Kunhardt's North Andover; Irving Nichols '25, of Gloucester at Braelands, North Andover; Willard Earley, '24, of Salem, at R. N. C. Barnes' Twin Cedar Farm, Andover, are all caring for large flocks.

George Veiner, '26, of Saugus, is carrying an interesting combination of home projects. Besides a good-sized market garden of his own, he is brooding a flock of 1100 chickens for his father. He has had to do considerable building to get ready for them.

Walter Wilkinson, '25, of Lynnfield, has a well-balanced general farm program which he has been developing in the two years he has been a student at Essex. This year's program includes the renovating of a run-down orchard, handling a small herd of milch cows, continuation of his market garden which was so successful last year, and the further development of his poultry, including the building of a large laying house.

SPRING WORK ON FARM AND GARDEN

The two illustrations shown on this page represent a part of the spring program of practical work on the school farm and gardens. One of the pictures shows an instructor teaching the boys how to shear sheep. The boy is actually doing the shearing, not merely observing the instructor. The other picture shows three boys engaged in a very necessary farm operation which usually insures an abundant harvest.

During the fall and spring terms the study program allows for a large amount of outside work. At this season of the year the students receive a maximum amount of farm practice in their respective fields of agriculture. Farm practice marks are kept and at the end of a four-year course, even the student himself is surprised at the great number of different farm operations he has actually performed at the School or elsewhere. To supplement this practice, the student must work on his own or some other farm and there continue his agricultural education.

SCHOOL NOTES

Camp Bauer, a new camp for the boys working at the School during the summer, was officially opened on May 1st. The large building at the rear of the Homemaking Department has been equipped with electric lights and many other conveniences which will make the boys' life at the Camp very pleasant. "Joe" Cassano of Groveland, Mass., Essex Aggie, '20 and M. A. C. '25, has been engaged as Camp Director, while Mrs. George Elliott of Hathorne is to prepare and serve the meals in the lunch room after the Homemaking Department closes.

The camp has been named after Mr. Ralph S. Bauer, of Lynn, President of the Board of Trustees. Needless to say, the boys working on the School Farm will be well cared for and they are assured of many of the recreational advantages of camp life.

The boys already living at the Camp are: Richard Ashton of Salem; Sidney Butler of Methuen; Stuart Cogswell of Essex; Albert Egerton of Beverly; Henry Ellis of Wakefield; Kenneth Harnden of Saugus; Maurice Headley of Newburyport; Donald Lewis of Nahant; Roscoe MacKenna of Lynn; Aaron Porter of Beverly; George Stickney of Haverhill; Harry Tucker of Beverly; Aubrey Vaughan of Lynn; Fred Walker, Jr., of Marblehead; George Ward of Saugus, and Arthur Wentworth of Lynn.

BASKETBALL CAPTAIN ELECTED

Chester Hansen of Beverly has been elected captain of the 1925 Essex Aggie Basketball team. Hansen has won his letter several times in both football and basketball and he is very popular among his school mates. The team is assured of another successful season under his leadership.



ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 5

HATHORNE, MASS., JULY 1924

No. 4

HOME CANNING FACTORY SUPPLIES ROADSIDE BOOTH

Danvers Woman Successful

The first year that I went to house-keeping, three years ago last summer, I canned all I could for my own family. I sent for government bulletins and read all I could on the subject. My husband was very proud of my cold closet and showed it to everyone. One friend upon seeing it asked me to do her canning the next year. I felt hardly capable but finally agreed to do so. Soon others heard of it and before I knew, it, much to my embarrassment, I had almost more than I could do. That first year I had two orders of over \$100.00 each.

Labor Day I put my surplus on a table made of two saw-horses and a board near the road. I made my stand as attractive and as neat as possible. I did no advertising. I knew I must stand back of my goods. I had canned 1,000 jars but not nearly enough to supply the trade that came.

I was into the canning game whether I wanted to be or not. I made up my mind I could run my home factory on a business basis and make a little money at home.

That first year I had done all my canning in my kitchen with what utensils I had, except that I bought a pressure cooker. I used a three-burner oil stove and a kitchen range.

The second year my husband painted what was once a milk room and made a cement floor. We put in running water and a sink, made some shelves and screened it in. It had four windows and two doors and was quite cool. I had two large work tables. I bought larger kettles, other utensils and another pressure cooker. I bought glasses and jars by the gross and a cash register. I hired a student from the Homemaking Department of our County Agricultural School to work for me for the season. We canned five days a week.

My second year I kept an accurate account of everything. I canned 2,000 jars during July and August with my assistant. She went back to school in September and before November 1st, I had canned another thousand myself.

Now, as to selling price. I figure home-raised goods at market price, keep an account of other materials used, cost of jars, time and fuel consumed. I try to make my price as reasonable as possible. I do not be-

(Continued on page 4)



Photo Showing Progress of New Greenhouse

NEW GREENHOUSE PLANT

Project Will Stimulate Horticultural Work

Our new greenhouse plant is fast taking shape, already it is possible for the visitors to see what the ultimate layout is to be. Everyone appreciates what the addition of this modern plant will mean to the instruction in the school. The greenhouse proper consists of four compartments; the larger compartment will be devoted to the growing of vegetables; the second compartment will be used for growing vegetables and flowering plants with some benches devoted to the growing of cut flowers; the third compartment which is a much smaller compartment will be used for raising of potted plants and the fourth compartment, a very small unit, will be a regular propagating house. Five divisions of the school work, namely market gardening, floriculture, ornamental gardening, fruit growing, science work and propagation will be allotted space.

Besides the glass structure proper, the buildings adjacent will have a work room, storage room, fire room and two fine small class rooms for the regular desk instructional work.

After waiting many years for this addition to our equipment, it will be seen that the school will be well rewarded by having such a complete and fine plant. It is bound to be a great stimulation to horticultural work through out the county.

PROJECT OF FRANCIS ELDRIDGE

Georgetown Boy Doing Well With Poultry

Francis Eldridge of Georgetown, a member of the Sophomore Class, has an interesting type of project this summer. Along poultry lines, he is brooding and raising 300 Rhode Island Red Chicks in a house built by himself and with his own capital. The cost of the stove and chicks as well as the cash necessary to carry the chicks during the season is also borne by himself. In addition, he is taking care of 30 hens in a house that was remodelled from an old shed. The house was modernized and electric lights also installed. The hens represent an all year round project.

Francis was selling strawberries in June from a bed $\frac{1}{4}$ acre in extent. This was set out last season, (Howard No. 17's), and cared for by himself. This spring, a new bed was started for another year of practically the same area.

In addition to the above home projects, Francis worked for two months at the Boxford Nurseries where he had a fine experience in the shipping department as well as in the propagation work. At present and for the rest of the summer, he will be on the modern general farm of Mr. Perley Killam of Boxford, where he feels that he will receive the general farm training that he wants.

The work of this student is interesting because he pays his own way and hustles for what he gets.

Essex Farmer and Home Maker

HATHORNE, MASS.

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CALENDAR

- Aug. 5-8. Conference, Mass. Vocational Agricultural Teachers, Norfolk County Agricultural School, Walpole, Mass.
- Aug. 16. Junior Field Day. All boys and girls invited.
- Aug. 20. Pomona Field Day and picnic.
- Sept. 2. Homemaking Department opens.
New students admitted to agricultural department.
- Sept. 29. School year opens for advanced students.

EDITORIAL

On Monday morning, July 14, fire destroyed a large part of the Homemaking Department building. Although we feel sadly crippled by this disastrous fire, the trustees have taken immediate action looking toward provision for housing this department. Many temporary plans have been put into motion and it is expected that this department will be well cared for by temporary housing. The work will commence promptly on Tuesday September 2nd.

The many friends of the school now feel that a building suitable in size and properly equipped should be provided for carrying on this work. Perhaps the fire which seemed disastrous will ultimately be a good thing for facilitating the work for this department of the school.

OPENING DATES

The dates for the resumption of classroom work as announced in the calendar are September 2 and 29. The homemaking department will begin class work on Tuesday Sept. 2, and new students will be admitted to the agricultural department on that date. Upper class students will return to the school on Monday Sept. 29.

ATHLETICS AT AGGIE

Camp Bauer Team Defeats Hathorne Tigers.—Football Schedule Announced

The Camp Bauer boys have organized a baseball team under the direction of Camp Leader Cassano '20. They opened their season with a game against the Faculty and were badly beaten. When the dust cleared in the 9th, the teachers had 12 runs and all the boys could show was four.

In the second contest the Camp Bauer team played better ball and turned the tables on the Hathorne Tigers 13-3. Evidently the teachers had put across another effective job of teaching.

On the first trip away, the Camp team played its best game to date. With score 2-1 against Topsfield, to start the final inning, the boys apparently had the game won. But two errors let in three Topsfield runs and the game was lost 4-2. Several more games are being arranged.

Three games are scheduled for the week of Aug. 4. Camp Bauer plays Asbury Grove, Rial Side and the Industrial Farm.

The Lineup

Pitcher	Cashman
Catcher	Watson
1st base	Eastwood
2nd base	Butler
3rd base	Belcher
Short stop	Page
Left field	MacKenna
Right field	Edgerton
Center field	Osborne

Substitutes: Law, Vaughan, Ward.

The Advisory Council recently awarded Track letters to five point winners, as follows: F. Kezer of Newburyport; Capt. Whittier of Ipswich; George Sargent of Saugus; Andrew Coukos of Lynn and James Silva of Rockport.

Football Schedule

Several cancellations have seriously interfered with the making of the 1924 Football Schedule and there remain at present only five games. However, coach Page is confident that he can easily fill in the open dates in September after the schools reopen.

The Essex Aggie schedule follows:

Oct. 13.	At Methuen.
Oct. 18.	Punchard.
Oct. 25.	Open.
Nov. 1.	At Saugus.
Nov. 8.	Manchester.
Nov. 15.	Open.
Nov. 25.	Danvers.

AGRICULTURAL SUGGESTIONS FOR JULY AND AUGUST

Poultry

Give the growing stock plenty of room. Crowding and close confinement will cause slow growth and development.

Don't forget to put in roosts for your young stock. They will grow better for having them. Put in plenty and fix them so they will be low.

A plenteous supply of fresh, clean drinking water is very important. Keep your pails and pans in a shady place and renew the water, several times daily. Never let the containers get empty!

This is the time of the year to fight the red-mites. Examine the roosts, dropping boards and nests frequently. Spray the roosts and dropping boards with some good disinfectant. Kerosene and crude carbolic is fine to use. Painting the roosts with old crank case oil is an excellent thing to do. Keep the nest material clean.

Get rid of all surplus cockerels as fast as they are of suitable weight. Dispose of the breeding males that you are not planning to keep over and take the rest from the laying flock in order to produce sterile eggs and thus cut down the danger of having eggs spoil in the warm weather.

FRUIT

Keep this year's bearing bed of strawberries another year by removing grass and weeds. Thin out old plants, hoe thoroughly. Fertilize, 500 lbs. to the acre, of 4-8-4.

Remove and burn this year's raspberries fruit canes. Fertilize with 4-8-4 if manure is not available. Give thorough cultivating and hoeing.

In thinning apples leave the largest one of each cluster, spacing three to eight inches apart.

Keeping grapes trained to stake or well tied on trellis permits easy cultivating and hoeing.

DAIRYING

Barley Hay for Green Feed

Three quarters of an acre of barley hay will furnish ten cows with green feed. Two plantings could be made about ten days apart. One and a half to two bushels of seed will be needed per acre. A fertilizer containing 2% nitrogen, 8% phosphoric acid, 2% potash may be used at the rate of 400-600 pounds per acre. Manure should also be used. To insure rank growth the more the better.



EXTENSION SERVICE



POULTRY DISEASE CONTROL

Demonstration Very Successful

One of the most serious of all poultry problems at the present time is that of maintaining the health of the flock. This did not need much consideration in years gone by when hens were not producing as many eggs as they now do, or when flocks were smaller, for there was little danger of contamination with the adequate farm range available. But with the industry in the county becoming more highly developed, and more specialized, the usual health dangers are encountered by the commercial poultry man, just as our growing cities found themselves confronted with big sanitation problems, which affected everyone's welfare.

Must Adopt New System

Realizing that it will be necessary to inaugurate a special campaign for poultry disease control, in the not too distant future, the county agent has been conducting a few individual demonstrations with the idea of introducing an efficient system of field rotation and getting a few local poultrymen in a position to testify to its efficiency, and value.

The system is a simple one, and involves the using of at least two, or better three lots of land on which to rear chickens. The land is only to be used one year, then it is seeded down or cropped for one, or better two years when the growing stock again have access to the land, which, because of cropping has become free from disease. The plan is simple, and it is sound because it is based on facts. If one starts with clean, healthy vigorous birds, those birds properly cared for, and reared on fresh, clean land, the result will be nice, clean, healthy chickens.

Success in growing strong young stock under these conditions is dependent on attention to details. Just as a chain is no stronger than its weakest link, this system of rotating yards is no stronger than its weakest spot—human carelessness, or neglect.

METHUEN MAN SUCCESSFUL

One of the most striking illustrations of what the rotation system will do is now being demonstrated at the plant of Joseph Batty, Pleasant Valley Road, Methuen. He had trouble aplenty last year, with paralysis, runts, listless and half grown birds, all because the flock was suffering from internal worms. A few treatments with the tobacco dust supplemented with clean new range worked wonders, and

today Mr. Batty's birds are the talk of Pleasant Valley. Drop in some time and ask Mr. Batty to tell you his experiences. Many poultrymen have had the same troubles and many more will have them. Whether you control poultry disease, or not, depends on your ability to establish and maintain a clean plant.

ANNUAL GRANGE FIELD DAY, AUGUST 20

Essex, Middlesex-Essex, and Chebacco
Pomonas to Meet at Hathorne

The annual Grange Field Day will be held at the Agricultural School, Hathorne, on August 20th. This year the Essex, Middlesex-Essex, and Chebacco Pomonas will unite and a fine program is being prepared to make the day enjoyable for all. National Master Tabor will be present, also High Priest of Demeter Charles M. Gardner, State Lecturer Burton T. Mowry, and Past-Master Chapman of the Massachusetts State Grange.

The field sports, including a ball game, will be run off as in previous years and entertainment for the children will be provided.

A State Grange silver cup will be awarded to the Grange having the largest attendance, and another cup to the Grange scoring highest in the athletic contests. Also silver cups will be awarded to the boy and girl making the highest individual scores.

If you are a Granger, attend the Field Day this year, at Hathorne on Wednesday, August 20th.

BETTER HOMES MAY

Over five hundred Essex County women gathered at the Agricultural School on June 12th to enjoy the program and various exhibits planned for the Better Homes Day.

The Home Demonstration Agent was glad to welcome so many with whom she and her assistants have been working during the past months.

Of the 35 towns in the county, 21 towns were represented. Members of the Extension Service from Worcester and Norfolk Counties were present and also representatives from the State Department of Education.

If the interest and enthusiasm shown by the women on that day is carried into the homes, surely Essex County will have Better Homes and Essex County homemakers will carry on their tasks with more joy and greater efficiency.

NORTH ANDOVER GIRLS COUNTY CHAMPIONS

Towns Wins Its First Club Honors

North Andover has done very well in winning three championships in 4-H Club Work. During the past three years there has been considerable clothing and food club work among the school children of North Andover but this last season's work surpassed all previous accomplishments.

Most of the credit is due to Miss Helen Doane, the cooking teacher of the schools. Miss Doane volunteered to carry on food and clothing club work outside of school hours and about forty girls finished the work successfully. The big exhibit at Stevens Hall was a fitting climax for the work. Miss Dorothy Murdock from the State Club office at Amherst judged the exhibits and awarded the Clothing Championship of Essex County to Miss Elizabeth Sullivan of Stevens St. The Cooking Championship was awarded to Miss Clara Curley.

Elizabeth's report showed that she had made six dresses, one a woolen dress, at a profit of twenty-five dollars. It was her second year in the club and in addition she did the following household duties during the winter—washed dishes 125 times, made beds 50 times, swept 35 times, dusted 35 times, table 45 times, cleaned stove twice. Elizabeth is to have a week's free trip to Camp Gilbert at the Massachusetts Agricultural College as a reward for winning the Clothing Club Championship of Essex County.

Clara Curley was chosen County Food Club Champion. Here is her record for the winter. She prepared 14 meals, baked 45 bakings of yeast bread, 2 dozen quick bread, 30 cakes, 8 gingerbreads, 6 bran muffins, 3 pans cookies, 3 scalloped dishes, 4 nut bread, 3 brown bread, and also made beds 375 times, washed dishes 341, dusted 25, ironed 12, cleaned windows 3 times, silver twice, swept 25 times. Looks as if Clara's mother might have had a rather light load of housework left for herself.

These two girls and Earl Foster will go to Camp Gilbert from North Andover. Other Essex County Club Champions who have earned a vacation are: Arthur Sevigny, formerly of Hathorne; Evelyn Landry, John Clarke, and Haig Depoian of Methuen; Madeleine Walker of Beverly; and Florindina Pascucci and Alvera Yanraifo of Haverhill.

JUNIOR CLUB PICNIC

AT HATHORNE

SATURDAY, AUGUST 16th

4-H Club Members Welcome

HOMEMAKING DEPARTMENT NOTES

Attendance Honor Roll

The following students in the Homemaking Department are on the Honor Roll of Attendance for the year 1923-24. Because of the long distances which most of the girls must travel, the record is especially commendable.

Those who have been present every day are: Evelyn Rice of Salem, Evelyn Scobey of Danvers, and Madeleine Walker of Beverly.

Those who have been present every day but one are: Helen Ray of West Newbury, Geraldine Boardman of Danvers, Dorothy Mattheson of Lawrence, Ruth Erickson of Danvers, Rae Reid of Georgetown, Evelyn Sawyer of Danvers, and Olga Carter of Beverly.

Frances Martin of Lynn has an unusual record. She was not absent or tardy during her first two years, and held that record through her senior year until March 23, 1924, when she was operated upon for appendicitis. After five weeks she was able to return to school, make up her work and finished with honors in scholarship.

Scholarship Honor Roll

The following students have a record of 90% or over for the last quarter of the school year: Hazel Eastman, Lynn, 94.4; Gladys Hulsman, Lynn, 93.8; Evelyn Rice, Salem, 93.6; Mary Scarlett, Lynn, 93.1; Elizabeth Egerston, Beverly, 93.0; Olive Blake, Rockport, 92.5; Rae Reid, Georgetown, 92.1; Margaret Greenleaf, Lynn, 91.8; Blanche Atherton, Lynn, 91.6; Madeleine Walker, Beverly, 91.6; Ruth Gay, Lynn, 91.5; Leslie Wagland, Methuen, 91.5; Doris Garland, Newburyport, 91.1; Gertrude Smith, Methuen, 91.0; Christine Gilman, Lawrence, 90.8; Arline Pilkington, Methuen, 90.8; Harriet Clements, Rockport, 90.7; Thelma Lyle, Andover, 90.0.

SCHOOL NOTES

During the first week of July many students visited the School for the purpose of renewing friendships and also to become acquainted with the many improvements which have been made during the last few months. The construction of the greenhouse, the relocation of the poultry plant, and the extensive plantings made by the Floriculture Division have all received much favorable comment. Among the students who returned were Alton Perkins, '23; J. E. Lombard, '24; Fred Kezer, '24; Maynard Brown, '24; Guy Philpot, '24; Melvin Sverker, '22; and Norman Libby, '23.

Although the fire of July 14th destroyed the Homemaking Building, that department will reopen as announced.

Plans are already being made to prepare temporary quarters in the Brick Building. Students of that department will report for class work on Tuesday, September 2nd.

* * *

There have been many requests as to the various activities at the School during the summer. This issue contains an article by Director Smith on the progress of the greenhouse to date. The picture (above) was taken by Mr. Mostrom about July 1st. Other activities happening at the School have appeared weekly in the different county papers. Let us know if your home paper does not use our letter. Look for it Thursday and Friday of each week.

* * *

Ernest Howe, '24, of Haverhill, has gone to East Greenwich, Rhode Island, where he has accepted a position at Wildacres Farms.

* * *

Fred Kezer '24, of Newburyport, has accepted a position at the Maude-sleigh Farm in West Newbury. Herman Herrick, a graduate of the School in the Class of 1921, is also employed there.

* * *

Mr. J. E. Eastwood of the staff has attended the Summer School at the Massachusetts Agricultural College, Amherst, Mass.

* * *

Instructor C. M. Wood is spending his vacation in Maine.

* * *

Kenneth Hilton and Harold Porter are working on the Colbert Farm in Middleton.

* * *

Gertrude Janes of Beverly, Class of 1924, is taking the nurses' preliminary course at the Thomas Hospital, Peabody, Mass.

* * *

Harry Tucker of Beverly has returned to his work in the floriculture division. Student Tucker has spent the last two weeks at Camp Devens.

* * *

Wendell Murray is now employed in the dairy division of the Mass. Agricultural College.

* * *

All of the agricultural instructors will attend a four-day conference at the Norfolk Agricultural School at Walpole, Mass., Aug. 5-8.

* * *

Instructors Doolittle and Moore attended the Poultry Convention held last week at the Mass. Agricultural College.

WHAT THE BOYS ARE DOING ON PROJECT

Weekly Reports

Saugus, June 27.

Milked, fed, and cleaned cows. Took care of milk, delivered and collected. Worked on milk room; have got it partly boarded in; finished cementing floor. Hoed and cultivated corn. Bought an ice chest (½ ton size). Cut green feed and made about ½ ton hay. Constructed two new tie-ups. Worked 1 day (7 hours) away, cultivating potatoes and haying.

G. S. '24.

School Poultry Plant, July 4.

We sold about 350 broilers last week. Canded eggs. Rearranged the roosts in the range houses and mixed 2400 lbs. grain. Broilers worth 42c to 47c in N. Y. Cleaned up around contest and separated 300 cockerels for fattening.

S. B. '26.

School Market Garden, June 27.

Cut, washed and packed lettuce. Transplanted celery. Cut and bunched asparagus. Wheel-hoed celery, carrots, beets, and onions. Dusted potatoes for beetles with Niagara dusting mixture. Leveled land where hot beds were and planted beans. Cut rye for hot bed mats. Dusted squash with arsenate of lead and lime.

York & Whitney, No. Market St., Boston, July 4-5.

Friday, no work.

Saturday. Market flooded with berries (Cape Cod) 6c-9c. Beans \$1.75-\$2.00 best price. Cabbage \$1.00. Cape Cod berries have good color and quality was never better, market men claim.

C. D.

HOME CANNING FACTORY

(Continued from page 1)

lieve in exorbitant prices and prices would vary with one's market. I find that the average person is willing to pay a good, fair price for home-raised and home-canned products. I try to keep up with the times and study and read all I can to improve my business.

One of the secrets of successful canning is fresh product. Some vegetables lose their sweetness and flavor in a few hours. Besides canning fruit and vegetables, I can chicken and chicken bouillon, fruit juices and make jellies, jams, conserves, marmalades and piccalillies.

Canning is a profitable way to use one's produce if one has not enough to make a load for market or the market is low. Do not use poor goods. NOTHING IS TOO GOOD TO CAN BUT MUCH IS TOO POOR.

Mrs. Arthur L. Usher,
Andover Street,
Danvers, Mass.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 5

HATHORNE, MASS., SEPTEMBER 1924

No. 5

THE GRADING AND PACKING OF APPLES

Points of a Good Pack

These two operations, fruit grading and packing, are very closely associated and the small grower unconsciously performs them both at the same time. However, these two operations are being done by two different people in the larger orchards and if a grading machine is used, this still further separates the grading from the packing. If a person is packing day in and day out, it very shortly becomes purely a mechanical job. Where the grading as well as the packing is done by hand, the grading is the most difficult operation of the two because it requires mental as well as manual alertness.

Nearly all the apples packed are graded under "Fancies" and "A's", sizes varying from 3 in. to 2½ in. to 2½ in. by quarter inches, according to the variety being graded. There are color requirements also going with the different grades, which varies with the variety. The apples must be free from disease and insect injuries for "Fancy", and have not more than 5% allowance for Grade "A". Grade "B" apples may be still smaller, have less color, and have not more than 10% disease and insect injuries. Thus the man grading by hand must have three things constantly in mind: size, color, and freedom from blemish. Where the apples are graded by machine, all the packer has to do is to consider the color and freedom from blemish; the machine sizes the apples automatically.

In this part of Massachusetts practically all of the apples are packed in the Boston Farm Produce Box, which measures 17½ in. x 17½ in. x 7 in., inside dimensions. The fruit grower usually buys these in shoeks and the usual procedure in packing apples is as follows: The sides and ends of the box are nailed together, then the risers and slats, forming the top eventually, are placed on. This is then put in a tray called a "false bottom." A piece of paper bearing a description of the contents of the box according to Massachusetts Apple Grading and Packing Law, is next placed, face down, on the slats. This description may also be stamped on the wooden box. The box is then ready for the packer, who may wrap the apples individually in the "Fancy" and "A" grades, before they are placed in the box. The number of apples in each

(Continued on page 7)



4H Club Members at Essex Aggie

CLUB BOYS AT AGGIE

New Students Result from Interest in Club Work

Students in the entering class at Essex Aggie are rapidly becoming acquainted with their new surroundings and some interesting facts have come to light concerning the sort of boys who compose the freshman class. One noticeable fact is that the incoming class has a large number of 4-H Club members. There are 14 boys who are or have been engaged in club work. This is remarkable and indicates that Club work in Essex County points the way to the Agricultural School.

Under the leadership of County Club Agent DeQuoy many boys have become interested in Essex Aggie and often after a friendly talk regarding future plans and a visit to the School, they decide to register. After entering the School, their interest in club work is continued. A poultry club composed wholly of Aggie students, has been organized each year.

The following is the list of 4-H Club boys enrolled in the entering class at this school: Paul Bubier, Rowley; George Metcalf, Saugus; Wallace Rennie, Andover; Herbert Rogers, Byfield; Andrew Baillie, Methuen; Wallace Corner, Jr., Essex; Reginald Dawkins, Groveland; Richard Gould, Amesbury; Paul Hlsley, Georgetown; Fred Bragdon, Essex; Robert Noyes, W. Newbury; Horace Shute, W. Newbury; Bernard Sargent, Merrimac; Frank Perrault, Haverhill.

ESSEX AGGIE AT THE FAIRS

Exhibits at Peabody and Topsfield

At the Lynn Fair, held September 9th to 13th, we had an educational exhibit composed principally of posters. This was in three sections. The right and left-hand sections depicted the various activities of the Homemaking and Agricultural Departments, including a list of subjects and occupations taught. The Extension Department occupied the middle section and illustrated the various activities of the Home Demonstration Agent. On a table placed in front of the booth were displayed mounted pictures of students on their home projects and a selected list of bulletins which are in most demand at the present time. Over 200 requests for these bulletins were received. Flowers and greenery added much to the attractiveness of the booth.

Our exhibit at Topsfield occupied the first booth at the left of the entrance to the Main Building. This was in the form of a hollow square, tables being placed on three sides. On the left hand table and wall, the Agricultural Department had an exhibit of specimens of insect and fungous injuries to fruits and vegetables, backed by the proper sprays to combat them, and on the wall were lists of the insects and diseases controlled by each spray, with ribbons from these to the spray and to the specimens. Spray bulletins were handed out.

(Continued on page 6)

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the
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CALENDAR

Nov. 25 Graduation Day.
Exercises in Peabody Institute, Danvers.

OUR GRADUATION

In a few weeks another class will be graduated from this school. The Class of 1924 will be the largest which has ever received diplomas. They have completed a successful course of study and project and are, we believe, well prepared to take up responsible life work.

Graduation will be held on Tuesday afternoon, November 25th, at Peabody Institute, Danvers. An invitation is herewith extended to citizens to attend these exercises and receive a first-hand demonstration of the way in which their financial and moral support is being used.

The graduating class will number fifty-five.

AN OPPORTUNITY

A prominent successful farmer in this county, who is now in his sixties, said to the writer: "I wish I had planted much heavier of fruit when I was planting, because I believe it to be one of the most profitable lines of farming for New England." As one branch of his farming operations, he receives a large per cent of income and profit from his fruit.

Last night the writer visited the farm of one of the graduates of this School, who was harvesting a superior crop of McIntosh Red apples. His enthusiasm for fruit growing was fully as great as that of the older farmer quoted above.

With this testimony reinforced by that of many other thoughtful men, is it not surprising that more young men are not taking courses of training to fit for this sort of a life work? In several cases parents have supported

a son through this School and then purchased a farm in order that both might operate the farm together. Would it not be wise for more parents to accept such an opportunity as offered by this School, which is made possible by the citizens of Essex County?

OPEN LETTER TO LAND OWNERS AND HUNTERS

The following letter from the Director of Conservation is printed herewith:

State House, Boston, Mass.,
September 16, 1924.

Essex County Agricultural School,
Hathorne, Massachusetts.
Gentlemen:

The open season on upland game will soon be at hand. During this period is witnessed the annual migration of the town and city dwellers to the open places, with its annual problem of the adjustment of interests between the landowners and the hunters.

The present system of free shooting as it obtains in this country depends on a democratic attitude on the part of the landowners. It is to their great credit that a wholesome feeling exists. While there is a tendency in certain localities to post land, the movement is not on the increase but rather declining.

The rank and file of hunters wish to conduct themselves properly when hunting, but there is a certain vicious element which has no respect for property rights or the feelings of others. Because of their depredations, the hunters as a whole have had to suffer through posted land and other restrictions on the sport.

This statement is made to impress on the landowners that we are not in sympathy with this lawless element, or with any hunter or fisherman who fails to treat the property and other interests of the landowners with the same consideration as would be the case were their respective positions exchanged.

The only way that we can hold this element in restraint is through our wardens. We regret they lack authority to arrest persons doing damage to property when in the act of hunting or fishing. At the last legislative session we tried to pass a law to correct this situation, but it did not pass though endorsed by the Executive Committee of the State Grange. We want to take away the license of such person for one year upon conviction.

This year our men will be instructed to assist in every way possible to obtain evidence of any such violations, and to assist the landowners in prosecutions where the wardens cannot take active charge by reason of such acts not being violations of the game laws. We are also proposing to the fish and

game associations that they pay a suitable reward for the arrest and conviction of persons guilty of such acts.

We want the landowners to feel this division functions in their interests as well as that of any other class. We want to array all parties in interest against the vicious element described above. I hope that in time jail sentences will be given those who persist in such abuse.

Please feel free to communicate with our wardens, or the central office at any time on the above matters. Likewise, keep in mind that in the course of a year we distribute substantial numbers of fish and game, and that we shall be pleased to entertain your applications for this stock.

The sportsmen of this state are strongly committed to the policy of helping build up agriculture; there should be no conflict of interests. As the landowner prospers so will the sportsmen's cause prosper, and there is every reason to look forward to increasing teamwork to such end.

Very truly yours,
WILLIAM ADAMS,
Director of Conservation.

SOME RECENT BULLETINS RECEIVED BY SCHOOL LIBRARY

Bulletin 118, May 1924.—A Statistical Study of Egg Production in Four Breeds of the Domestic Fowl. Agri. Exp. Station, Storrs, Conn.

Extension Bulletin 36, May 1924.—Factors in Profitable Poultry Keeping. New Jersey State Agricultural College, New Brunswick, N. J.

Bulletin 35, August 1924.—Culling for Efficient Egg Production. University of Maryland, College Park, Md. Ext. Service.

Extension Service Circular 176, July 1924.—Successful Home Canning and Jelly Making. University of Wisconsin, Madison, Wis.

Circular 79, July 1924.—Some Common Diseases of Farm Animals. New Mexico College of Agriculture. State College, N. M. Extension Service.

Extension Service Bulletin 78, August 1924. Bacillary White Diarrhoea by R. E. Jones. Connecticut Agricultural College, Storrs, Conn.

Extension Service Bulletin 77, June 1924.—Vegetable Storage—Both Home and Commercial. Connecticut Agricultural College, Storrs, Conn.

Bulletin 215, April 1923.—Pedigree, Basis of Selecting Breeding Males for Egg Production. Agricultural Experiment Station, Amherst, Mass.

Bulletin 216, June 1923.—Digestion Experiments with Cattle Feeds. Agricultural Experiment Station, Amherst, Mass.

SELECTING PULLETS, HENS AND BREEDING MALES

Cull Before Placing Birds Into Winter Quarters

At this season of the year, poultry keepers are housing their young stock for the coming season, and special care should be taken that only the very best specimens of the breed handled should be kept.

No pullets should be housed that have any physical defects, such as black feathers in white birds, feathers on clean-shanked birds, single combs on rose-comb breeds, crooked backs, wry tails, crooked beaks, crippled toes, or birds with badly deformed keels. Look out for sick ones.

It is important that the pullets should be well developed as to size and weight before housing. Pullet breeding has had the tendency to produce small pullets. Make sure that the birds are up to the standard weight for the breed. Leghorn pullets should weigh $3\frac{1}{2}$ lbs. at least, Plymouth Rocks, 6 lbs., and Rhode Island Reds, 5 lbs. It is important that the pullets go into their winter quarters in good flesh so that they will be in condition to stand the heavy strain of egg production which we are expecting.

It is well to select the birds by daylight, as good and bad points can be much better observed than at night. Be sure that all the birds are blue-battered for lice.

Many of us have to keep over some old birds for our layers as well as for the breeding pens. One does not have to be an expert in culling to pick out the best ones to save for another year. The points given below, if followed, will help us in our selection.

Moulting or condition of plumage is one of the best indications of rate and length of laying. A hen with dirty plumage, feathers that appear ragged, and tail feathers that are broken as well as ragged is usually a good layer. The best layer starts laying first and stops last, while the poor one starts last and stops first.

The Kind To Keep

1. Strong, healthy, vigorous hens with short, neat heads and strong beaks.
2. The hens with long, deep, rectangular bodies and parallel top and bottom lines.
3. The hens with bright eyes, active appearance, and short, well-worn toe nails.
4. The hens that moult late and moult fast.
5. The noisy, happy, friendly hen.
6. The early risers and those late to roost.
7. The vigorous hens with faded beaks and shanks.

8. The hens with thin pelvic bones spread wide apart.

The Kind To Sell

1. Poor layers, cripples, and hens with broken down abdomens or frozen toes.
2. The sick, quiet, inactive ones that spend much time on the roost or in the corner.
3. All "crow heads" with long, slim heads and beaks.
4. Hens that moult before August 1st, and have fine-looking feathers.
5. The persistent setters.
6. All hens with solid, fat abdomens.
7. All hens with bad habits, such as egg eating.

The weights of Leghorn hens should be at least 4 lbs., Plymouth Rock hens should weigh $7\frac{1}{2}$ lbs., Rhode Island Red hens should weigh 6 lbs.

The Kind of Male Birds to Keep

The male should have vigor and vitality and not be below weight for the breed. He should be free from any physical defect as outlined at the beginning of this article, and have plenty of capacity in the width and length of his back, a long keel bone, width of chest, and strong legs, placed well apart.

Plymouth Rock males should weigh, cockerels 8 lbs., cocks $9\frac{1}{2}$ lbs. Rhode Island Red males should weigh, cockerels $7\frac{1}{2}$ lbs., cocks $8\frac{1}{2}$ lbs. White Leghorn males should weigh, cockerels $4\frac{1}{2}$ lbs., cocks $5\frac{1}{2}$ lbs.

A NEW WAY TO MAKE GRAPE JUICE

Since the 18th amendment, grape juice has become a household necessity in every hospitable home. The card parties, receptions, dances and summer picnics owe much to the tempting "ruby" juice served in tall glasses with chilled ice or mingled in an interesting fruit punch. A very simple made grape juice is the following:

Wash and stem 10 lbs. of grapes, put grapes with one cup of water in a granite kettle and heat until stones and pulp separate. Then strain through a fine press or jelly bag. Add 3 lbs. sugar, heat to boiling point and bottle. Be sure to have the bottle well washed and sterilized. Fill the hot bottle with the hot juice, cork and dip the top of each corked bottle into sealing wax so that the cork and top of the bottle are well covered with wax and tightly sealed. Ten pounds of grapes should make a gallon of grape juice and this can be adulterated as it is necessary.

Experiment Station Notes

VALUABLE SUGGESTIONS FOR THE VEGETABLE GARDENER

Have you made plans for the storage of your vegetables for the winter? It is a very simple thing to make a place for storing root vegetables as well as cabbage and celery if the pits are not to be opened until spring. Dig a hole about a foot deep, three feet wide and as long as necessary, in a well drained spot; place a small amount of straw or dry leaves on the bottom, and pile your root crops and cover with a small amount of straw until freezing weather sets in. Then throw on five or six inches of loam on top of the straw. A single layer of cabbage or celery is all that can be placed in these pits, and they should be treated the same as the root crops, that is, a small amount of straw placed on top until freezing weather, and then throwing on four or five inches of loam. For a storage place which can be opened during the winter it is well worth while to build a pit with a wooden roof, and a door that can be easily opened and also easily protected in case of freezing weather. A hole two feet deep and five to six feet wide and as long as necessary can be used, and boards placed as a roof with straw on top of the boards, and when freezing weather sets in cover straw with a small amount of loam. The door can be used to ventilate with until cool weather sets in, when care must be used to keep the contents from freezing, by using hay or straw over the door.

The carrot blight has not been very serious this year in any of the sections where carrots are grown to any extent. Last year at this time the carrots at the Field Station were completely blighted so that it was hard to pull them, as well as preventing a good growth. This year the blight has just started in and there are only a few leaves which are brown. The treatments to date, of seed and of the carrot tops for prevention of the blight have not shown any practical control.

Have you cleaned up your weeds and refuse? It is money well spent to thoroughly clean all of your own land. You not only kill the weed seeds, but kill the insects which live over the winter in the stalks. The corn borer is the most important, but there are other insects which can be somewhat controlled by thoroughly cleaning up and burning all refuse.

ALUMNI NOTES

We have received word from William Abbott now in Lancaster, New Hampshire, that a daughter Virginia Helen was born August 8th. Mr. Abbott is employed as local manager for the H. P. Hood and Sons.

HOME DEMONSTRATION AGENT

EXTENSION CLASS NOW FORMING

Are You Enrolled?

Vacations are over and the homemakers of Essex County are making plans for fall and winter work.

Forty-one applications have already been received by the Home Demonstration Agent from communities wishing help in nutrition, home management, garment making or millinery.

Vital Duties of Homemaking

Mrs. Ida S. Harrington of New York State College says that Farm Management has learned to ask not "How many crops?" but "What crops?" Home management has still to learn that its function is to answer the question "Which are the vital duties of homemaking?" Hit and miss expenditures of strength leads to nervous breakdowns. Hit and miss expenditures of time leads to the disheartening conviction that "woman's work is never done."

The housewife who is over burdened needs to study her problem as to the relative importance of different tasks upon which she is engaged, eliminating here and there duties which do not effect the health and happiness of her family.

When the necessary work has been decided upon, she may find the best possible control of it by equipping her household better, by sending out work, by securing the cooperation of other members of the household and by a careful daily or weekly scheduling of time and meals.

"A well ordered household is essential to a happy home and without a happy home, no farm is fully a success."

PICKLING

Pickles have practically no food value except possibly as stimulants for digestive juices. They are themselves hard to digest and should be used sparingly by adults and never by children.

Cautions as to use of poor or low grade materials in fruit and vegetable canning apply equally with pickles. Vinegars used should be just right as to strength; neither too acid nor too weak. Legal strength, i. e., 4% acidity is right. Spice should be used in moderation; too much spoils the true flavors. If spices be tied in bags so that they may be removed easily when sufficient flavor has been extracted, the quality of the finished product is improved.

WHAT IS YOUR SCORE?

Much has been said concerning the scoring of children as to health, food habits, etc. Dr. Caroline Hedger of the Elizabeth McCormick Memorial of Chicago, says that the most accurate score of the parent appears in the whole condition of the child. The following score card is suggested by Dr. Hedger.

Score of Parents in Care of Children.		Credit Deduct	Deductions Credits
15	For PERFECT TEAMWORK OF PARENTS.		
8	If one parent does not back up reasonable orders of other		
7	If parents argue on child's program in his presence		
25	For CONSERVATION AND MEDICAL CARE OF CHILD.		
5	For glasses fitted by optician or department store		
5	For patent medicine given		
5	For unoperated throat or nose in mouth breather		
3	For track or competitive athletics in below weight child		
3	For track or competitive athletics without examination of heart and urine		
4	For unsupervised recreation (late hours, unaccompanied auto trips, improper dancing, uncensored movies)		
21	For PROPER DISCIPLINE (including positive orders or requests, controlled temper, quiet voice, saying "Please do" this or that).		
5	For loud voice in parent		
3	For constant fault-finding		
5	For punishing child when parent is angry		
3	For saying "Don't" to child		
5	For allowing child to do a thing once and forbidding it under same circumstances a second time		
11	For PROPER PROGRAM FOR GROWING CHILD.		
	Deduct for pursuit of "culture" in underweight and nervous children, as follows:		
3	For music lessons		
2	For dancing		
2	For plays		
2	For pageants		
2	For Drills		
	(If children are up to weight and not nervous, give parents full credit of 11.)		
28	For HOME EDUCATION (which would prepare child for family life).		
5	For not making child do his share at home		
3	For disorderly child		
10	For lying to child, especially about reproduction of life		
5	For failure to prepare child for puberty		
5	For allowing jokes with double meaning		
100	Total Score		

Brining before using is done to increase firmness. Do not leave the vegetables in the brine too long. A standard brine is made of 1 pound of salt to 1 gallon of water.

Use glass jars with glass covers for pickles. Earthenware jars are sometimes imperfect in the glazing and

give unpleasant flavors to products.

Among the more common pickles are cucumber pickle, piccalilli and mustard pickles.

"Nothing can run any length of time without water—even your watch has a spring."—"Tidings," Mass. State Dept. of Health.

COUNTY CLUB AGENT

4-H CLUB EXHIBIT AT TOPSFIELD FAIR

The Essex County Agricultural Society which conducts the Topsfield Fair has given some very generous premiums to Junior Club Exhibits. This year's exhibits at the Fair consisted of vegetables, clothing, foods and canning. The vegetable exhibit display occupied the entire side of the vegetable tent, the junior poultry club exhibits were housed in the poultry building, while the other exhibits were displayed in the balcony of the Grange building. Every 4-H club exhibit bore a small card marked with a 4-H clover, the emblem of club work.

The Prize Winners

In the Junior Club exhibits, Robert Moulton of West Peabody won seven first and two second places. He had the best individual collection of vegetables, the best sweet corn, cucumbers, parsnips, cauliflower and celery. He also had the best retail package of fruit. He won second prize in beets and onions. This is a remarkable showing and netted this 4-H club boy \$10 in prize money and two ribbons.

Horace Shute of West Newbury, a student in the entering class at Essex Aggie, won all three prizes for the best Barred Rock cockerel. He also won all three prizes for the best Barred Rock pullet, also first prize for the best Rhode Island Red pullet. All of the above were entered in the utility class.

Madeleine Walker of Beverly, a member in the Senior Class in the Homemaking Department won first prize of \$1.00 for the best loaf of white yeast bread. She also won first prize for the best jar of blueberries.

Bernard Sargent of Merrimack, another entering student at Essex Aggie, won first prize for the best Rhode Island Red pullet and second prize for the best Rhode Island Red cockerel.

Russell Ray, West Newbury, a second-year student at Essex Aggie won the following prizes: second on cabbage and parsnips, third on carrots and potatoes.

George Morse of Georgetown won 1st prize on cabbage. He is a Junior at Essex Aggie as well as a 4-H club member.

In the Home Economics section, the first prize for the best exhibit of canned fruits and vegetables by a canning club was won by the Beverly Boys' Club, Beverly Health Center. For the best exhibit for canned fruits and vegetables by an individual Rena Eaton of Lynn was awarded first prize.

AGGIE PRIZE WINNERS AT TOPSFIELD

Several of the winners in the 4-H Club Exhibit at the Topsfield Fair are Essex Aggie students. The exhibit consisted of vegetables, poultry and canning and reflected much credit on club work in Essex County under the leadership of County Club Agent DeQuoy.

The following students won prizes for their exhibits at the Topsfield Fair:

George Morse of Georgetown, Russell Ray and Horace Shute of West Newbury, Bernard Sargent of Merrimack and Madeleine Walker of Beverly.

FOOTBALL.

Coach Page has issued the first call for candidates for the Essex Aggie 1924 football team. The entering students have been practicing for a week and with the return of the upper class men, a football team will be rapidly developed.

The first game is scheduled for Monday, October 13th, with Methuen High at Methuen, and the Aggie team will have to work hard to get itself into shape before that date.

Other games are as follows:

- Oct. 13 Methuen High at Methuen.
- Oct. 18 Puncard High at Danvers.
- Oct. 25 Dummer Academy at Byfield.
- Nov. 1 Saugus High at Saugus.
- Nov. 8 Manchester High at Danvers.
- Nov. 15 Gloucester High at Gloucester.
- Nov. 22 Danvers High at Danvers.

4-H CLOVER LEAVES

Greta Askman of Beverly is to represent Essex County at Camp Vail, the 4-H gathering at the Eastern States Exposition.

Miss Helen Doane who was so active as leader in club work in North Andover last winter is making good as assistant county club agent in Hampden county.

Friends of Miss Dorothy Murdock will regret to learn that she is leaving active service as assistant state leader. Her successor has been named.

Those who are interested in club work will find it a pleasure to visit the Beverly Canning Exhibit at the Beverly Health Center during the week of October 13th.

JUDGES AT FAIR

Miss Marion P. Crawford, Home Demonstration Agent, and Instructor Metcalf of the vegetable garden division, acted as judges of the Junior exhibit at the Topsfield Fair.

WEST NEWBURY BOY POULTRY WINNER

First County Club Champion for That Town

The Essex County Poultry Club Championship for the winter of 1923-24 was won by Horace Shute of West Newbury. This boy joined the poultry club of West Newbury High School which was the first high school club to be organized in the county. Horace was very much interested in poultry and his work was carried on under the usual farm conditions.

To begin with, Horace remodelled his poultry houses. He then housed 49 pullets which laid a total of 3122 eggs during the winter. The yield in November, December and January was exceptional for that time of the year. The eggs were valued at \$127.03. After cost of grain, depreciation of stock and other expenses were deducted a profit of \$37.32 remained.

This was not the highest profit made by a club member but other factors decided the championship in his favor. With the advice and help of County Club Agent DeQuoy, he renovated an old incubator, installed a new water tank and started in to increase his flock. Horace won the poultry championship because he paid strict attention to business, he was willing to accept suggestions and help; he increased his stock and equipment, besides making a small profit.

Second place went to Ralph Wentzell of Methuen. Ralph also owned his flock which produced 1871 eggs at a profit of \$31.26. He did no hatching however. Adrien Newell of Amesbury had the highest record for profit in the county. He made \$5.56 per bird on 38 pullets. However, he did no hatching and did not own the birds. In fairness to Adrien it should be said that he lives on a small place in town and his father prefers to keep the ownership in his own hands and also tend to the hatching and rearing.

TREAT THE YOUNGSTERS RIGHT

If farmers find it worth while to heat water for their cows, to cook feed for their hogs and to have a hot drink for themselves when lunching in the fields, is it not worth while to provide something warm for the boys and girls who are eating a cold lunch at school? Children not only eat to supply the daily needs of the body but they must furnish their bodies with material for growth.

To serve one hot dish each day to supplement the cold lunch brought from home may be a means of providing adequate daily nourishment for the child.

THE HIGH PRODUCING COW

Herd Improvement Through Selection Means Profit

Massachusetts Department of Agriculture recently released a circular summarizing the dairy situation in Massachusetts as follows:

- (1) Only high producing cows make milk production profitable.
- (2) Massachusetts cows in 1923 averaged to product twenty-seven hundred quarts of milk each.
- (3) Wisconsin finds cows of Massachusetts production unprofitable.
- (4) Massachusetts farmers are improving their herds.
- (5) Eighty percent of Massachusetts crop land must from necessity be devoted to the production of hay and other forage crops—from the standpoint of economy, fluid milk is the cheapest way to market these crops. Hence the average Massachusetts farmer must be a dairy farmer.

The only conclusion that can be drawn from the foregoing summary is that the Massachusetts dairy farmer is an economic necessity and that it can be made either unprofitable or profitable depending on whether you have low or high producing cows in your herd.

The question that probably arises in the minds of some interested in dairying are: What are the typical characteristics found in a high producing cow? How am I to know whether the cow I have selected is going to be a high producer or not?

The questions can best be answered by analyzing the following terms, in reference to the dairy cow:

- (1) General appearance.
- (2) Constitution.
- (3) Capacity.
- (4) Mammary development.
- (5) Quality and temperament.

In selecting high producing cow from the standpoint of:—

- (1) General appearance. You should keep the following points in mind. The animal should be clean cut, fine in features, and triangular in body outline. When the animal features are not distinct and the animal is coarse and heavy at prominent points and a tendency to be blocky in outline, you can make up your mind that that animal at her best is only a fair producer. The reason for this is easily understood when you consider that the animal's food goes for the production of flesh and not for the production of milk.
- (2) Constitution. You should choose

a cow that has its foreribs well sprung, chest deep, full at the elbows, good width on the floor of the chest, and muzzle large and strong. These characteristics show that the cow can take enormous quantities of air, which is needed for heavy milk production.

- (3) Capacity. The body should be long, loin broad, and level at the hips, ribs well rounded and body deep at the flank. A cow with a middle of this conformation will be able to handle large quantities of feed; thus having the ability to produce large quantities of milk.
- (4) Mammary Development. The rump should be long and level; udder large and level, broad and high behind, extending well forward, teats of good size and squarely placed; pins high and wide, milk veins large, long and tortuous extending well forward and milk wells large. A cow with an udder development of the foregoing type would be able to handle large quantities of food nutrients and quickly manufacture it into milk, thus producing large quantities.
- (5) Quality. The cow should have a long fine clean head and high and wide forehead; a large bright eye; openness of ribs and spine; a fine loose pliable skin. A cow in this condition is in the best of health and all of its organs can function at their best to produce large quantities of normal wholesome milk.

Attention to the above points when selecting a dairy cow will result in the improvement of your dairy herd.

LETTER FROM HAROLD HOLDEN "ESSEX AGGIE" 1922

North Branch, Mich.,
Aug. 8, 1924.

Dear Mother:

Is it raining any in Massachusetts? It has rained almost every day for the last two weeks out here. Just in haying season too. Two weeks back we had some pretty good hay weather. I finished up my work early and helped a neighbor get in his hay. We got in about 30 good big loads in less than a week. I went back afternoons and helped him and we made about six loads an afternoon. This farmer had about thirty acres of good heavy hay. About five acres are standing now and a few loads are on the ground. This farmer runs a threshing machine and will soon be threshing the grain. Wheat has been cut about a week now and stands in the shock drying out.

Farmers have been troubled with chicken thieves lately. One farmer and his son cornered two of them one

night then the farmer sent his son for help. When the boy got back he found his father dead. Another thief came along, who had been watching, and killed the boy. They got away for about a week when they were captured and jailed. Some more thieves have been working in the section and the sheriff and a few deputies have been watching for them. They got them the other night. The Sheriff was waiting for them to go thru the town. They come along about two o'clock in the morning and the sheriff tried to stop them. The thieves wouldn't stop and so the sheriff gave them a chase a few miles. The thieves jumped from a truck while it was going and let it run into a ditch. They were soon caught and locked up. I guess we won't have much more trouble with chicken thieves.

Well I'll close this letter hoping to hear from you soon.

HAROLD (HOLDEN).

ESSEX AGGIE AT THE FAIRS

(Continued from page 1)

The middle table was very tastily arranged with a week's supply of fruits and vegetables for a family of five. These totalled about 55 lbs. and cost in the neighborhood of \$3.50. Those fruits and vegetables rich in vitamins were starred on a large placard. Other descriptive cards had ribbons leading to the various fruits and vegetables. Another instructive chart was labeled "Do You Get the Most from your \$10" and showed that it should be divided in such a proportion that dairy products should total \$4.40, fruits and vegetables \$1.70, bread and cereals, \$1.20; meat and fish, contrary to the usual conception, \$1.20; eggs, 60 cents sugar, 50 cents; and extras, 50 cents.

The right-hand table and wall were devoted to the Homemaking Department. The key idea of this part of the exhibit was "Burned Up But Not Out," calling attention to the fact that, while the fire of July 14th destroyed the Homemaking Department and its contents, the students had since September 8th been able to make in the Sewing Division 70 dish towels, 16 food cloths, 52 cooking caps, 33 cooking aprons, 6 floor cloths, and 7 door curtains; and in the Cooking Division had canned the following: 56 qts. tomatoes, 18 qts. carrots, 20 qts. beets, 2 qts. beans, 20 qts. spinach, 19 qts. pears, 5 qts. peaches 31 qts. Pottsville pickle, 18 pts. piccalilli, 4 pts. pickled onions, 10 pts. chili sauce, 24 pts. green tomato mincemeat, 12 pts. sweet pickled pears, 10 pts. pepper relish, 6 pts. apple butter, 145 jars apple jelly, 29 jars mint jelly, 96 jars orange marmalade, 36 jars carrot marmalade, 75 jars crabapple jelly, 15 jars prune and apricot conserve. Samples of their sewing and canning were very attractively displayed. Over 400 bulletins were issued.



EXTENSION SERVICE



THE NEW ENGLAND APPLE CROP

Bay State Apples Lead

Nowhere in the wide world are better apples grown than are produced in New England, and of the New England states, Massachusetts leads in this year's estimated crop with 635,000 barrels, with Maine closely following with 604,000 barrels. The other New England states in order are New Hampshire, 256,000 barrels; Connecticut, 185,000 barrels; Vermont, 142,000 barrels; Rhode Island, 60,000 barrels. The present forecast for the New England commercial apple crop is about 10 per cent more than the 1923 crop and 12 per cent above the 10-year average. Throughout the United States the box and barrel apples together promise about 82 per cent of their 1923 total and 95 per cent of their 10-year average.

Among the competitive fruits last year, the northwest had a very large prune crop which sold at extremely low prices. It hindered apple sales somewhat but the prune crop is very light this year and will offer no hindrance to apples. Oranges, grapefruit and lemons were abundant last year and oranges in particular, seriously limited the sale of apples in New England but all of these crops are considerable smaller this year. Cranberries show a much smaller crop and while peaches have been a good crop, the bulk of them is out of the way. Therefore, the demand for good quality apples should be better than last year. Canadian and foreign apple prospects are far below last year's crop, so it would be well for the householder to lay in his supply of apples as early as possible, for a considerable quantity will be exported this year.

Hood River apples can compete in color and size but beneath the skin they are not in the same class as Massachusetts-grown apples. The interest in apple orcharding is certainly increasing in this state, and it is one of a half dozen of special lines of farming that are profitable and capable of extension. The local county agricultural agent was instrumental in putting over a very effective "Better Apple" campaign. It is estimated that there are about 170,000 apple trees in Essex County and more than 20,000 of these were registered by about 50 growers, these being principally all of the commercial growers. The balance of the trees are scattered in small home orchards. There has also been formed the Essex County Fruit Growers association during this last year and the apple prospects in Essex County are exceedingly promising.

SECOND NATIONAL APPLE WEEK IN MASSACHUSETTS

Last year a contest for the purpose of popularizing Massachusetts grown apples with the many consumers of our cities by attractive window displays was sponsored by the Massachusetts State Chamber of Commerce, which sent letters to city Chambers favoring and encouraging these displays. Dr. Arthur W. Gilbert, Commissioner of Agriculture, authorized the giving of prizes in behalf of the State Department. These were in the form of official blue ribbons and were awarded to the merchants of each city and town who arranged the most attractive store window display of Massachusetts apples. Salem and Amesbury in Essex County co-operated last year with the State Chamber of Commerce.

The Salem Chamber of Commerce is already getting plans under way for the observance of Apple Week again this year. Last year's observance, it will be remembered, was quite a success. Apples were displayed in banks, restaurants, and other store windows in addition to the provision stores. The fruit on display was for the most part procured through the assistance of the Essex County Agricultural School from Essex County orchards.

This year it is planned to use a display tray like those used this fall for the first time at the Topsfield Fair. These are the exact size of the Boston Market Produce box, that is, 17½" x 17½" (inside dimensions) but only 2¾" deep, thus taking just one layer of apples and making a very attractive display package. From last year's experience it was found that the farmers were anxious to display their apples and were very willing to co-operate in providing the fruit. It is hoped that as good, if not better, a display of apples from this section can be exhibited this year.

Former County Agent Tomlinson's work this last spring and summer in getting Essex County orchardists to grow 'apples that could be eaten in the dark' will be of material assistance to the ones in charge of Apple Week displays in the cities and towns of Essex County.

Apple Day last year at the Eastern States Exposition attracted so much attention that it has been decided to continue the venture at the Brockton Fair this year. Massachusetts Agricultural College is co-operating with the Brockton Fair officials and apples will be distributed on Apple Day at the Fair, the plan being that as you come onto the grounds, a ticket will

be given everybody, good for one apple. This is the time of the year to increase the consumption of apples. Fruit growers in other states are getting this idea and if we can all keep pounding away, we can increase the per capita consumption of fruits in our own section to the improvement of all apple markets.

Apple Week will also be observed in the schools, all of which should create greater interest than ever in Essex County grown apples.

Sweet Cucumber Pickles

Prick small cucumbers with a large darning needle. Place in a brine overnight, in the morning wipe very carefully and pack in jars. Pour over them a syrup made in proportion of one heaping cup of brown sugar to two cups of vinegar to which whole mixed spice has been added (about one heaping tablespoon of the mixed and one tablespoon of white mustard seed). Bring to a boil and pour over the pickles in jar. Seal. Pickles will be ready to use in about two months. Cost 50 cents a jar, not including jar.

Mrs. Alice B. Lewis, Andover.

THE GRADING AND PACKING OF APPLES

(Continued from page 1)

layer varies with the size, and shape of the apple and whether it is packed with cheek showing or with stem end showing. There are three layers in the box of 2¾ in. apples. The packer plans to place those apples which are a trifle larger in the center. After the box is filled, the bottom is nailed on, and the whole is inverted by means of the "false bottom." The larger apples in the middle of each layer give a slight bulge to the slats. The advantage of packing the top of the box first is so that when the slats and raisers are removed, the box may present a more uniform and pleasing appearance.

In order to obtain fancy fruit in the fall, one must begin the year before and prune his trees so that sunlight may enter into all parts of the top to get sufficient color. Then fertilization must be carefully attended to in order that the apples may grow to the proper size. To keep the apples free from blemishes, an effective spraying campaign must be carried on. Thinning the apples in most varieties is necessary to get the required size and not cause the breaking of the branches when the apples are matured. Thus you see that the successful grower of apples does not wait until the harvest to plan for his perfect fruit.

NEW ARRANGEMENTS IN THE HOMEMAKING DE- PARTMENT OF THE SCHOOL

There are a great many women and girls in the county who have heard with sorrow of the burning of the Homemaking Building on July 14. The building was not large nor beautiful, when viewed from the outside, but inside it was homey; and like a home, it was the center of many interesting activities and held many pleasant memories for those who had spent some years in work and recreation within its walls. The little red house, as some were wont to call it, was nearly destroyed, but the lower part has been rebuilt and renovated so that the two kitchens, dining room, lunch room, and assembly hall are much the same as they were before the fire. That makes it possible to hold the cooking classes as formerly, and the east, or back part of the assembly hall is to be curtained off for an academic room. In the assembly hall the piano and victrola have been replaced and the morning assembly is held there each day as before.

Because the upper story has not been rebuilt, five rooms on the second floor of the Agricultural Building have been turned over to the Homemaking Department and are being rapidly changed from agricultural to sewing rooms. Already, sewing machines, electric irons and ironing boards, clothing, posters, and millinery samples are changing the general appearance of the rooms. Altho it is far from efficient for either department, the whole faculty and all of the students are making the best of it, with the hope that it is only a temporary arrangement, and that in the not far distant future the Agricultural Department may again have the use of the rooms which they so much need, and that the



The Little Red House

Homemaking Department will have a new home of its own, commodious, sanitary, and up-to-date in every way, pleasantly situated on the campus.

HOMEMAKING NOTES

All of the members of the Graduating Class have had very interesting summer projects and several are planning to enter hospitals this fall or winter to train for nursing.

* * *
Olga Carter, High School Special '24, has entered Beverly Hospital as a student nurse.

* * *
Elizabeth Egerton and Evelyn Rice, H. S. S. '24, are continuing their studies at the School of Domestic Science in Boston.

* * *
Gladys Hulsman has been with Mrs. Usher again this summer, doing canning and assisting at the roadside

booth. She plans to enter Beverly Hospital as a student nurse, in January.

* * *
Hazel Eastman is taking a special course at Lynn Classical High School this year, preparatory to entering Framingham State Normal School next September.

PRESERVE NOW

The canning season brings all sorts of interesting new recipes and many old ones again come to light. One of the best pickle recipes that is used each year in the Homemaking Department is called Potsfield Pickle. Just as "A rose by any other name would smell as sweet," so this delightful combination of vegetables, spices and vinegar would be as tasty under any other name, but we will call it:

Potsfield Pickle—3 lbs. green tomatoes, 3 lbs. ripe tomatoes, 1 small cabbage, 3 red peppers, 2 bunches celery, ½ cup salt, 1 qt. onions. Chop and mix together and let it stand over night. Drain in the morning and add: 3 pts. vinegar, 2 lbs. sugar, ½ cup mustard seed, 2 tbsp. mixed whole spice tied into a bag. Cook about two hours or until tender, pack in jars and seal.

If your family is fond of pickle you would better double your recipe the first time for I am sure you will find that you haven't anywhere near enough no matter how much you make.

HAVE YOU HEARD

THESE BEFORE?

"If you wish to get ahead, let it be a head of lettuce."

"It is a well balanced school program that includes a pair of scales."



Remodeled Homemaking Building

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 5

HATHORNE, MASS., NOVEMBER, 1924

No. 6

CLASS OF 1924 GRADUATES

Exercises at Peabody Institute, Danvers, Nov. 25, 2 P. M.

1. Opening March, "America's Finest" Zamecnik School Orchestra
2. Invocation
3. Song, "Esmeralda," Halliday-Levey Home Making Department Chorus
4. Training in Home Making:
 - (a) House Planning Hazel A. Eastman, '24
 - (b) Clothing, Blanche Atherton, '24
 - (c) Cooking Madeleine Walker, '24
 - (d) Home Nursing, Gladys H. Hulsman, '24
 - (e) Athletics, Leslie E. Wagland, '24

5. Songs,
 - (a) "Come, Cheer Up!," McCarty
 - (b) "In the Deep Cold Sea," WingateAgricultural Department Glee Club

6. Training in Agriculture:
 - (a) Project Experiences, Harold A. Wilson, '24
 - (b) A Quality Vegetable Pack, C. Brooks Dwyer, '24
7. Songs:
 - (a) "Creole Love Song," Smith
 - (b) Bendemeer's Stream," BrewerHome Making Department Glee Club

8. (a) Presentation of Gold Prizes offered by Mrs. R. S. Bauer for excellence in Summer Projects in Home Making.

(b) Presentation of Gold Prizes offered by Ralph S. Bauer for excellence in Summer Agricultural Projects.

R. W. Stimson, Agent,
State Department of Education

9. Selection, "Hunting Song," Lazarus
School Orchestra

10. (a) Address to Graduates.
(b) Presentation of Diplomas, President Ralph S. Bauer, Board of Trustees

Musical Director, Miss Flora I. Richmond, Danvers.
Pianist, Miss Dorothy Mattheson, Class of '25.



The New Greenhouse

MODERN PLANT NEARING COMPLETION

A modern greenhouse has been erected on the school grounds, on the hillside south of the service road and near the tennis court.

The greenhouse itself above the foundations was erected by the King Construction Company and is a modern three-quarters span house, with steel frame. It consists of four compartments and is 30 feet by 152 feet, outside dimensions. The first compartment is a small propagating house. This is provided with sand benches and sash frames and is properly piped and equipped for all kinds of work connected with the growing of cuttings and also for grafting and budding. Compartment two is a general purpose house, fully piped and benched to carry potted plants. Compartment three is a large compartment and is to be benched for the purpose of growing vegetables and cut flowers. There will also be room in this house for the work of the Science Division and the Fruit Division. The fourth, which is the largest compartment, is to be given over wholly to the growing of early vegetables and vegetable plants.

The green house is now largely occupied, the most attractive crops being tomatoes for fruit and chrysanth-

mums. A wide general stock of the usual greenhouse and florist's plants has already been assembled. As has been indicated, at least five divisions of the School work will be carried on and exemplified in this building.

In addition to the greenhouse proper, the balance of the establishment comprises a concrete fireroom with workroom above, a large well-lighted potting shed and workroom, and also a classroom building. The classroom building will have suitable rooms for the accommodation of two divisions, with chairs, tables, blackboards, and all of the customary classroom equipment. There will also be two basement rooms, useful for the storage of extra equipment, bulbs, pots, and accessories. One of the basement rooms will have sufficient light so that it may be used as an emergency class or workroom. Besides the above, room is provided for the shelter of soil, sand, fertilizer, flats, the coal, and wood. It will thus be seen that the plant is to be very complete.

Graduates and visitors who are constantly inspecting the greenhouse are very enthusiastic over it and already everyone is wondering how the School has conducted the instruction work in the handling of plant life without access to a greenhouse.

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

A BI-MONTHLY PUBLICATION SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

Entered as second class matter, May 28, 1919, at the post office at Hathorne, Mass., under the act of August 24, 1912.

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CALENDAR

- Nov. 25 Graduation Exercises, 2 p. m., Peabody Institute.
Dec. 19 School closes for Christmas vacation, both departments.
Jan. 5 School re-opens.
March 10 Annual Farmers' Day.
March Boston Market Gardeners' Field Day at the School.

OUR GRADUATING CLASS

On Tuesday, November 25th, the class of 1924 will be graduated from this school. This marks the passing from school life of the largest graduating class in the history of the school. We believe this class to be well fitted to take up the various lines of work for which they have trained. Already the graduates in the Agricultural Department have shown by their selection the field of agriculture in which they will be active. Amongst their number we note young men who are going to enter general farming, poultry raising, market gardening, fruit growing, dairying, floriculture and estate work. We believe the young women graduating from the Home Making Department are selecting equally valuable lines of work.

When the statistics are examined concerning the graduates of the school, it will be found that about 78 per cent. of the students trained in this school are now engaged in the practical lines for which they trained. In the last two or three classes this percentage runs even higher. In view of this fact it would seem that the school is accomplishing in the same manner the work for which it was established.

GRADUATING CLASS

Agricultural Department Candidates for Diplomas

Francis James Bowen, Lynnfield.
Maynard A. Brown, Danvers.
George D. Constantinides, Lynn.
Herbert Cyril Coulman, Lynn.
James Henry Curran, Danvers.
Robert Stanley Dill, North Andover.
Constant Albert Dreano, Revere.
C. Brooks Dwyer, Bradford.
Willard A. Earley, Salem.
Frederick Kenneth Harnden, Saugus.
O. Maurice Headley, Newburyport.
Olive E. Holmes, Swampscott.
Clifford Hentz Homan, Marblehead.
Ernest Alvin Howe, Groveland.
Wilfred N. Jordan, Ipswich.
Frederick Gowen Kezer, Newburyport.
John Edwin Lombard, Ipswich.
Francis W. MacLaughlin, Gloucester.
Charles Thomas O'Keefe, Peabody.
Arnold Clinton Oulton, Swampscott.
Guy Dudley Philpot, Beverly.
Edmund Greenleaf Plummer, Newbury.
Hugh Charles Reilly, Ipswich.
Carl Douglas Roberts, Newbury.
Evan Bertram Roberts, Topsfield.
Ernest Frederick Robinson, Methuen.
Edward Parker Ryan, Swampscott.
George Wallace Sargent, Saugus.
Elmer C. W. Shattuck, Ballardvale.
John J. Sullivan, Salem.
Harry Ray Tucker, Beverly.
Herbert Sydney Whittier, Ipswich.
Harold Albert Wilson, Haverhill.
Harold Carl Wolfgram, Marblehead.
Home Making Department Candidates
for Diplomas

Gladys Blanche Atherton, Lynn.
Mabel Louise Batchelder, Lynn.
Lovilla Violet Baxter, Newburyport.
Janet Lucy Dyer, Danvers.
Hazel Allard Eastman, Lynn.
Luciel Gardner, Gloucester.
Gladys Helena Hulsman, Lynn.
Gertrude Marie Janes, Danvers.
Frances Sterling Martin, Lynn.
Evelyn Mildred Newhall, Lynn.
Eleanor A. Oulton, Swampscott.
Bertha Louise Punchard, Peabody.
Evelyn Frances Sawyer, Danvers.
Leslie Eugenia Wagland, Methuen.
Madeleine Olive Walker, Beverly.
Charlotte Adams Wright, Newburypt.

Candidates for Certificates

Olive May Blake, Rockport.
Olga Mae Carter, Beverly.
Harriet Ellen Clements, Rockport.
Elizabeth Blunt Egerton, Beverly.
Ruth Eliza Peach, Marblehead.
Helen Severance Ray, West Newbury.
H. Evelyn Rice, Salem.

The Faculty Committee on Assemblies has arranged a very attractive program for the year, which includes outside speakers of note; student debates; current events, and musical programs.

FOOTBALL, 1924

Aggie Plays Holden High at Danvers, November 22

On Saturday, November 22nd, the Aggie team plays Holden High of Danvers. This game is the last one on the Aggie Schedule and we look forward to this game as the most important one on the Aggie schedule. The team has done remarkably well considering the fact that the Aggie team does not begin to practise until her opponents have played several games.

The summary of the season is as follows:

Methuen, 12 to 0.
Punchard, 0 to 0.
Dummer Academy, 25 to 2.
Saugus, 0 to 0.
Manchester, 0 to 15.
Gloucester, 26 to 0.

HOCKEY

Faculty Manager Stowell is arranging a series of eight games for the hockey season. The Aggie team will play St. John's Prep, Holden High of Danvers, Beverly and Ipswich.

INTERCLASS TRACK MEET SUCCESSFUL

Andrew Coukos of Lynn Wins Most Points for the Boys—Marjorie Hawkes of Danvers for the Girls

First Prize Winners

BOYS

100-Yard Dash—Livermore, 11s.
Mile Run—Richardson.
High Jump—R. Smith, 4 ft. 9 in.
Quarter Mile—McNichol, 59 2-5s.
220-Yard Dash—Ward, 29 4-5s.
Shot Put—Coukos, 35 ft. 5 in.
Running Broad—Ward 17ft. 2½ in.
Half Mile—Cogswell, 2m. 19s.

GIRLS

50-Yard Dash—Hawkes, 7s.
Running Broad—Flint, 12 ft. 10½ in.
100-Yard Dash—Hawkes, 14 3-5s.
Standing Broad—Hawkes, 6 ft. 8 in.
Running High—M. Greenleaf, 3 ft. 9 in.

The Seniors won the boys' fence climb, girls' bean bag, relay, girls' basketball and the relay race for the boys.

Summary of points by classes: Seniors 106, Juniors 101, Sophomores 35, Freshman 6.

On Friday, October 31, the Faculty and students enjoyed a Halloween party given by the Senior, and High School Special classes of the Home Making Department. This was the first social event of the year and proved to be very enjoyable for all who attended.



EXTENSION SERVICE



SALEM ORGANIZES FIRST NUTRITION GROUP

Other Communities to Follow

Salem has formed the first group for the study of nutrition. The meetings are held in the home of one of the members. Simple meals are prepared emphasizing the use of milk, fruit, vegetables and coarse cereals.

Time is taken for the discussion of the nutritive value of foods, meal planning, the food budget, short cuts in meal preparation and table service.

Plans are being made for similar meetings to be held in Peabody, Marblehead, Hamilton and Merrimacport.

Town Chairman Appreciated

The Home Demonstration Agent wants to take this opportunity to express her appreciation of the work done this fall by the Town Chairmen of Essex County.

The task of the Town Chairman is sometimes a difficult one. She assumes the responsibility for the enrollment of groups, place of meeting and equipment.

We appreciate the loyal support given us by these women and hope to be of greater service to them and to the community for whose interests they are working.

Extension Service Is Extending

Since September 1st, 41 communities of Essex County have been reached through the Extension Service. Of these, 7 communities have not previously been in touch with this department.

We are glad to keep our old friends and also glad to feel that we are gaining new ones.

The Soul of the Home

The Board of Directors of the General Federation of Woman's Clubs have created a new department, to be known as the Department of the American Home. The general purpose is to emphasize the home as the fundamental institution for learning and practising the business of living.

It is stated that 92 per cent. of the women of America do their own work, and that the mere mechanics of the home take so much time that there is none left to give to the soul of the home. Labor-saving devices and conveniences of every sort are urged to make more efficient the homes of America.

Mrs. John D. Sherman, new President of the Federation, says that "Doing hard work toward a noble end is noble, but wasting hard work is sheer folly. Make the home attractive; for

beauty and comfort are as essential as efficiency. There should be that intangible something in the home that radiates harmony, friendliness and wholesome, purposeful living."

Have the homes of Essex County such an atmosphere or do they simply provide food and shelter for the family?

MILLINERY AND GARMENT MAKING POPULAR

Meetings for millinery and garment making are being scheduled all over the county. In some communities dates are being given for April and May of 1925.

The following communities are holding meetings in November: Millinery, Merrimackport, Merrimac, Salem, Lynnfield, Georgetown, Amesbury, Lynn (East), Lynn (West), Marblehead, Hathorne, Danvers, Ipswich. Garment making, Rowley, Newburyport, Lynn (East), Lynn (General Electric), Danielsville, Amesbury, West Newbury.

MARION P. CRAWFORD,

Home Demonstration Agent.

CANNING DONE BY HOME MAKING STUDENTS IN THEIR OWN HOMES

The girls in the Home Making Department are taught canning during the first ten or twelve days of the fall term and are then given a home canning project.

A record is kept of the work of each girl and the following report shows the number of products which have been canned since September 10th:

Pickle	326½
Jelly	846½
Piccalilli	533
Marmalade	157
Jam	136
Mincemeat	41
Conserve	149
Vegetables	725
Fruit	688
	3602

The largest amount canned by any one girl was done by Margaret Greenleaf of Lynn and was as follows: Fruit, 32 pints pears, 18 pints peaches, 18 pints blueberries, 19 pints cranberries. Vegetables, 6 pints beans, 16 pints rhubarb. Conserve, 10 glasses. Jelly, 49 glasses. Relishes of different kinds, 20 pints.

HOME ECONOMICS CLUBS PROGRESS

4-H Clubs for Girls Teach Practical Arts

Essex Aggie's Extension Service to our Essex County boys and girls is known as 4-H Club Work. One of the most popular 4-H Clubs is the Clothing Club. This club is started in December and continues until May. Schools where sewing instruction is not given are preferred in starting the work, but in a few localities clubs are carried on even though the schools teach sewing.

The work of obtaining enrollment and securing a volunteer leader to instruct the girls is the duty of the County Club Agent. Then the club is left in the care of the leader who receives material and suggestions from the County Club office at Hathorne. Some of the leaders are secured by the girls who want to form a club. These leaders sometimes are school teachers, or sometimes interested townswomen who want to help along a good cause.

Last winter 33 clothing clubs were carried on by 25 volunteer leaders. Eighteen of these clubs finished 100 per cent. of the requirements per member. Three hundred and twenty-five girls started the season and two hundred sixty-one completed the work, making a record of 80 per cent. completion, which is remarkable. The girls made 1,255 articles which if bought would cost at least \$2,025. The actual cost of material amounted to only \$876.58. The saving is evident.

Then for mending, the girls repaired 2,595 articles. Ten girls did the family mending, six the family sewing, and eighteen did all their own sewing. This year ninety-six girls learned to use the sewing machine through club work. On the whole, this report discloses the values of club work as being first—the large number of young people who are reached; second—the belief in the work as shown by volunteer leadership; third—the attractiveness of the work as shown by large completion and over 50 per cent. banner clubs, and last—the practicability of the work as evidenced by the large amount of work done by its members and the very plain fact that hundreds of dollars were saved by this work.

This year's clubs should surpass even this fine record. Local Leaders are needed! Will you help?

Let us never forget that the cultivation of the earth is the most important labor of man.

—DANIEL WEBSTER

HOME MAKING DEPT. NOTES

Girls' Basketball

A new idea has been worked out for the girls' basketball this year. Four teams are to be chosen from the basketball squad. These teams are to represent Massachusetts Agriculture College and the University of New Hampshire.

The squads will practise and work out passes and signals among themselves. The squads are very evenly divided and by the first of February every team should be able to play an excellent game. The game between the two college teams will take place some time in February. All the girls and faculty in the Home Making Department have pledged their support to one team or the other and they will form the cheering squad, so necessary for successful playing.

The idea is copied from one which has been in vogue at Framingham Normal School for several years. It has been adopted to overcome the strain put upon the girls by the extra practise and much traveling necessary to play games with other schools. Because of the support of the faculty and students, the success of the plan is assured.

Summer Projects

The summer projects in the Home Making Department were especially good during the past summer and the people who were chosen to decide who should be the successful candidates for the Bauer prizes found the decision a difficult one. The students who stood out as especially worthy of attention were Stella Burbine of North Beverly, Alice Coleman of Peabody, Corabel Gardner of Swampscott, Doris Garland of Newburyport, Phyllis Greenleaf of Lynn, Gladys Hulsman of Lynn, Margaret Knights of Salem, Florence Mason of Marblehead, Esther Meyers of Lynn, and Gertrude Smith of Methuen. These projects were all the home making line, including sewing, cooking, general housework, waitress work, care of the sick, and entire care of children, and settling and decorating a home after moving. Some of the work was done in the students' own homes and some in the homes of others, for pay. Those who did work outside were highly recommended by their employers.

Educational Trip

The Seniors and High School Special Class in the Home Making Department, with Miss Browne and Mrs. Clapp, attended the Annual Style Show which was held at the Farley Harvey Company's wholesale store on Essex Street, Boston. A lecture was given by Miss Mary

Walker, associated with Amory Browne & Company, on the subject "Selecting Color and Fabric for Individual Types." Moving pictures on the manufacture of cotton and wool were also shown. An opportunity was given the girls to visit all the departments of the store, which were very attractively arranged.

During the day many interesting places were visited in Boston, including the State House and Public Library, as well as several of the large retail stores.

BAUER PRIZE CANDIDATES

As the project season draws to a close, the instructors in the Agricultural Department have presented for the consideration of the Bauer Prize Committee another strong list of candidates for the awards. Ten boys, representing all four classes of last year, have earned this much sought-for honor. From the class of 1924 are George Constantinides of Lynn (a Federal student at the School), Willard Earley of Salem, John E. Lombard of Ipswich, Evan Roberts of Topsfield, George Sargent of Saugus, and Elmer Shattuck of Ballardvale. Irving Nichols of Gloucester is a member of the class of 1925, and Edward Dodge of Beverly represents 1926. The two remaining candidates, Russell Ray of West Newbury and Wendell Wright of Danvers, belong to 1927.

Practically every field of agricultural work is represented in the activities of these boys, the list including poultry, dairying, dairy manufactures, fruit, market gardening, small animals, and home vegetable gardening. A wide range of responsibility is also indicated, running from the more modest home ownership project of one of the first-year boys to managerial responsibility of a large home dairy project and of whole farms.

Every one of these students has earned the highest sort of commendation either from his instructor or his employer, and the task of deciding which boys out of the group are entitled to the five prizes given annually by President Bauer of the Board of Trustees will undoubtedly prove a very difficult one for the examining committee. This committee consists of County Commissioner Trefry of the Board of Trustees, and Mr. J. N. Dummer and Mr. H. A. Harrington of the Agricultural Advisory Council. The final meeting of this committee for the purpose of deciding on the winners will be held just previous to Graduation Exercises in Peabody Institute. According to the usual custom, Mr. Rufus W. Stimson of the Department of Education will award the prizes.

ATTENTION ALUMNI

Annual Reception and Banquet November 25th

The biggest alumni day of Essex Aggie is at hand with class get-togethers and a banner program of enjoyment. The day is November 25th.

The alumni is making an appeal to all of its members for an excellent representation that the students and others interested in the school may clearly see that the alumni is a wide-awake organization.

At 2 o'clock on the 25th, exercises will begin in the Peabody Institute, Danvers, when the largest class in the history of the School will be graduated. At 5.45 p. m. in the Home Making Building on the Aggie campus, the annual alumni meeting and banquet will take place. Both of these events are very important in the alumni program of the year, and every member should feel the necessity of a 100 per cent. gathering.

The annual graduation reception, that is ably conducted each year by the alumni association, is scheduled to follow the banquet and will begin at 7.45 p. m. in Aggie Hall. If you are looking for a real enjoyable get-together do not fail to be present at this reception.

Our alumni association is in full co-operation in all of Aggie's undertakings, that lead toward definite progressive results. We are in the service of Essex County.

ERNEST A. HOWARD,
President Alumni Association.

SCHOOL NOTES

The Student Recommendation Committee held its first meeting of the year on Thursday, November 6th. Norman Morgan of Methuen, of the Senior Class, was chosen as chairman and Ruth Gay of Lynn, of the same class, was elected secretary. Other members of the committee are Ruth Brooks of Lynn, Sidney Butler of Methuen of the Junior class; Elizabeth Hutchinson of Nahant, and Clifford Sewell of West Lynn of the Sophomore class; Ernest Peabody of Georgetown of the Freshman class; Edward Perry of Georgetown of the IIC class, and Virginia Davis of West Newbury of the High School Special class.

The Student Welfare Committee has approved of the following social program for the year: Play by Senior girls followed by dance given by the Sophomores in December. Senior dance in January. Junior prom in February, and High School Special play in March. Arrangements are being made to have a basketball game at Hathorne with Norfolk and Bristol on the dates of the Senior and Junior dances.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 6

HATHORNE, MASS., JANUARY, 1925

No. 1

BAUER PRIZE WINNERS

Gold Prizes Awarded Agricultural and Homemaking Projects

As prophesied in a previous issue of the "Farmer and Homemaker," the judges in the competition for the Bauer prizes found the race between the candidates exceedingly close and the determination of winners a rather difficult task. Awards were finally made as follows:

Agricultural Department

First prize, \$20, won by J. E. Lombard of Ipswich; second prize, \$10, won by Evan Roberts of Topsfield; third prize, \$10, won by Wendell Wright of Danvers; fourth prize, \$5, won by Irving Nichols of Gloucester; fifth prize, \$5, won by Russell Ray of West Newbury.

Student Lombard conducted one of the most notable dairy projects which we have had in recent years. The history of it goes back to his junior year when, with the assistance of another member of his family, he made a start towards establishing a dairy enterprise of his own, by purchasing two cows, one a pure bred and the other a good grade, both of the Holstein breed. During that summer he laid well a foundation for a permanent enterprise, returning to school to complete his work of the senior year and to further as far as possible his training in Dairy Farming. Early this summer he rented Eagle Hill Farm, an 80-acre farm adjacent to his own place in Ipswich, fully equipped, and purchased three pure bred Holstein cows and two pure bred Holstein heifers. As most of his cows freshened in June, he was able to meet the demands of a large summer season retail trade and gave such satisfaction that the enterprise grew rapidly so that by the close of the season he had a total of thirteen head of stock. On actual test it was shown that from a bacterial point of view Lombard's milk compared very favorably in cleanliness with the best milk produced in town, at one time showing the lowest bacterial count of any. When the summer trade dropped off, Lombard's reputation was such as to assist him in finding a steady winter outlet for his product. His success should be of interest to every citizen of Essex County who is anxious to see farming standards maintained and built up in the county, for he has added to the sum total of farming enterprises one more pro-



A WINTER SCENE IN ESSEX COUNTY

We all like beautiful scenery. Most of us believe, however, that we must travel far away to see anything worth-while, therefore, our eyes are closed to the beautiful scenes near at hand. Few of us have ever taken the trouble to discover anew some of nature's pictures. There are many scenes like the above in Essex County. We have only to go and search for them.

The above scene of the "First Snow" was taken by senior student Trow near his home in Beverly, Mass. We believe that the young man has a keen sense of what is beautiful in Nature as well as being a good photographer.

ductive farm on a sound financial basis.

Homemaking Department

First prize, \$20, won by Stella Burbine of North Beverly; second prize, \$10, won by Alice Coleman of Peabody; third prize, \$10, won by Phyllis Greenleaf of Lynn; fourth prize, \$5, won by Florence Mason of Marblehead; fifth prize, \$5, won by Esther Meyers of Lynn.

(Continued on Page 7)

ELEVENTH ANNUAL FARMERS' DAY

Annual Event Scheduled for March 4

Arrangements for the Annual Farmers' Day at Hathorne are well under way and the event promises to be bigger and better than ever.

The lecture program will be up to the standard set in past years. The committee will not be satisfied unless it obtains the best. In addition to the main speaking program, the sectional meetings will be held in vegetable gardening, fruit and poultry.

These group meetings have proven very popular in the past, as they have given the farmers and homemakers of Essex County the opportunity to freely discuss their problems with recognized authorities. Many people come to Hathorne on Farmers' day to take part in these discussions.

The usual trade and farm machinery exhibits will be held in the large arena. These exhibits have grown rapidly, from a small exhibit in one room, to many exhibits covering more than an entire floor of the main building. The merchants of the county are co-operating to make the exhibits worthwhile.

Women's Section

Mrs. Carolyn Webber Bixby, Home Economics lecturer and teacher, will give her popular lecture "Routine that Allows for Leisure."

This consists of a lecture-demonstration on home management and equipment, and is illustrated by photographs and an exhibit of small kitchen equipment.

The Home Demonstration Agent is planning a health exhibit with special emphasis on overweights and underweights. There will be a mechanical exhibit "From Farm to Door Step."

Those who have attended the meetings in the past appreciate the value of the social opportunities as well as the opportunity of getting subject matter from lectures and demonstrations. This year our program will be arranged with fewer conflicts of speakers scheduled, so there will be more chance for enjoying the exhibits and personal contacts.

A complete program will be given in the next issue, as well as in all the county papers. March 4th will be a red letter day for Essex County farmers and homemakers.

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CALENDAR

- Feb. 18—Chebaco Pomona Grange
Field meeting at School.
Feb. 23—Monday. No School session.
Washington's Birthday
Celebration.
Mar. 4—Eleventh Annual Farmers'
Day at School.
Mar. 6—Third term ends in Agricultural
Department.
Mar. 6—Third term ends in Home-
making Department.
Mar. 21—Boston Market Gardners'
Association at School.

RAILROAD ABANDONMENT

The apparent abandonment of two lines of the Boston and Maine Railroad is causing considerable consternation amongst friends and patrons of the School. One of the reasons which weighed heavily in the selection of the present site of the School was the accessibility by rail. At the time the trustees felt that this removed from consideration the necessity of maintaining a dormitory system.

These branches under consideration serve considerable proportion of the rural part of Essex County and from these sections we draw a considerable percentage of our student body. Incidentally we are dependent upon the railroad for the handling of fuel, manures and fertilizers, building materials and the many other commodities which are required in the operation of a diversified school.

From a purely selfish point of view it is certainly to be desired that some arrangements be made by which the railroad service be continued.

New Building

As the winter comes on, the difficulty of operating the Homemaking Department of this school in scat-

tered buildings becomes more and more apparent and trying. A bill has been filed before the general court asking for an appropriation for the building of a modest but suitable building for the purpose of the Homemaking Department. Already many prominent organizations including the Associate Boards of Trade of Essex County and the Pomona Granges have approved and endorsed this proposition. The large mass of students of the school, both former students and graduates, are very enthusiastic for the plan. The success which the graduates have attained is going a long way toward proving the usefulness of the department.

Annual Farmers' Day

Preliminary notices are going out concerning the Essex County Farmers' Day which is to be held at the School on Wednesday, March 4th. Truly this has come to be a big event in the agricultural and home-making life of the county. This conference has grown from a gathering of a few hundred people at the outset to the present when our attendance sometimes numbers considerably over a thousand people.

The program of this year now being rapidly put into shape promises many unique features. Let it be remembered that the purpose of this conference is to give farmers and homemakers the latest suggestions in regard to their line of work and at a time when it can be applied most advantageously. The trade and educational exhibits will be as fine as ever shown before.

RECENT PUBLICATIONS

The book "Fifty Famous Farmers" by L. S. Ivins and A. E. Winship, and published by the MacMillan Co., is a collection of short biographies of the men who have made great contributions to scientific agriculture. The book includes chapters on the creators of better plants and animals, leaders in rural life, inventors, soil experts, and administrators. The book will prove of interest to every student of agriculture.

The new book entitled "The Food Supply of New England," which has been prepared and edited by Dr. A. W. Gilbert, Massachusetts Commissioner of Agriculture has just been issued from the MacMillan Company's office. This book, dealing with an ever present and vital problem of the New England farmer, should be read by every progressive farmer.

Purchased pleasures are measured by the pocketbook don't rely too much on them.

ATHLETICS AT AGGIE

Basketball and Hockey—Leading Winter Sports

Essex Aggie opens its hockey season with a game at home with Beverly High School on Saturday afternoon, January 9th. The Aggies have five veterans and as they defeated Beverly last year, should come through with frequent victories.

The hockey schedule follows: Jan. 9, Beverly at Hathorne; Jan. 13, St. John's at Danvers; Jan. 16, Manchester, pending; Jan. 20, Danvers at Danvers; Jan. 23, Ipswich at Ipswich; Jan. 27, Chelsea at Hathorne; Jan. 30, Beverly at Beverly; Feb. 6, open; Feb. 10, Danvers at Hathorne; Feb. 13, Ipswich at Hathorne.

Essex Aggie's basketball season opens Monday with Manchester High as the first opponent. This is a home game and will be handled by Fred Lewis. The basketball team will be made up of green material mostly, as there are only two veterans in school—Capt. Hansen, who is in his fourth year at forward, and Coukos at center, also starting his fourth season. However, the other candidates, although inexperienced, are coming fast. The basketball schedule follows: Jan. 12, Manchester at Hathorne; Jan. 14, Alumni at Hathorne; Jan. 16, Methuen at Methuen; Jan. 21, Haverhill at Haverhill; Jan. 23, Norfolk Aggies at Hathorne; Jan. 28, Gloucester at Hathorne; Jan. 30, Swampscott at Swampscott; Feb. 4, Swampscott at Hathorne; Feb. 11, Marblehead at Hathorne; Feb. 13, Bristol Aggies at Hathorne; Feb. 18, Methuen at Hathorne; Feb. 21, Gloucester at Gloucester; Feb. 28, Lynn Classical at Lynn; March 4, Manchester at Manchester; March 6, Norfolk Aggies at Walpole; March 13, Bristol Aggies at Segreganset.

The big games of the season will be, of course, with Norfolk Aggies and Bristol Aggies. The Norfolk Aggies game, which comes on January 23d, will be staged in the evening in conjunction with the Senior Dance, and the Bristol Aggies game comes Feb. 13, on the usual date of the Junior Prom. These are the only two evening home games. The other home games will be played in the afternoon.

INDOOR TRACK

The outlook for an indoor track team is promising. There is plenty of track material in the School at present and Coach Page is planning an interclass meet on February 13th. This event will prepare material for the annual Gloucester meet scheduled for February 21st. Still another opportunity to enter an indoor track meet will be offered later in the season.

THE POULTRY "PLAGUE"

At the present writing the eastern poultry world is greatly disturbed by a mysterious disease which some authorities call the European plague. "Plague" is a general term applied to many diseases, all of which may be entirely different as to results. The prevailing trouble in the west and east is not communicable to human beings.

Poultry authorities are not all agreed as to what this poultry plague may be; some say it is like pneumonia and others agree it is like cholera. Recently several of the New England States have declared an embargo on shipments in or out of their states, but so far Massachusetts has not officially done so. Of course poultry cannot be shipped alive to these states or to New York City markets.

The entries at the recent Boston Poultry Show were not affected by fear of this outbreak.

As near as we can find, the disease is highly fatal, death occurring in a few hours, and may strike plants where the most strict sanitary practices are followed, as well as plants not so well cared for. The symptoms may be as follows: A general sluggishness, ruffled feathers, and perhaps difficulty in breathing. The heads may swell quickly but with no signs of a cold; the head parts may turn black and the birds die in a few hours. In some cases mucus is found in the throat, or the lungs may show a condition like pneumonia. There may be some diarrhoea and also a thin fluid may be found in the body cavity.

Preventive Measures

No cure is known for this trouble but preventive measures may check losses. Guard against bringing healthy birds into contact with diseased ones. Keep newly purchased birds isolated for ten days before putting them into the pen with the others.

Visitors to your plant should be kept out, as they may bring disease.

Dogs and cats might carry the germs.

Shipping crates, coops and other containers should be thoroughly disinfected or destroyed.

Poultry manure from outside plants may be a source of trouble.

Feed bags may carry the disease, so purchase grain if possible in new bags. Refilled old bags may carry this trouble from one plant to another.

Remove all sick birds and burn all dead bodies. Thoroughly clean and disinfect the houses and do the same to all feed and drinking utensils. Use some powerful but safe disinfectant.

Watch out for poor feed; keep the health of your flock up to par, and look out for drafts and dampness; practice all sanitary measures.

When going from one pen to an-

other, disinfect your feet by walking through a shallow box with sawdust in it which has soaked in some strong disinfectant.

TIMELY SUGGESTIONS FOR THE MARKET GARDNER

The present is the time of the year to make your plans for next year. What are we going to plant this next season? Are we going to grow our own plants or buy them; such as, cabbage, tomatoes and celery? Are we going to plant some crops that we didn't last year, or drop some out of our rotations?

Why not take account of stock by taking pad and pencil and drawing up a little plan of what we are planning to grow next season and then what will follow the shorter season crops after they have been harvested? Then after we have made our plans for next season, we must look over the seed and plant food situation.

Send for new seed catalogs and after a careful study of them, order your seed so that you may receive it in time to test the germinating power of the seed. The results of the test will indicate how thick to plant your seeds next spring.

Send for this year's prices of fertilizers and after you have found out how much you will need for this year's crop, send in your order so you will have an early delivery and have your fertilizer at hand when you need it. You can save considerable money by mixing your own fertilizer. Why pay some one else to put a "filler" of sand in some fertilizers when you can mix your own and save handling the extra amount? Have you inquired to see if manure can be purchased in your town at a reasonable price? There is nothing better than good rich horse or cow manure for your crops. Why not be hauling manure to your land now, putting it into a compost pile to rot and have it ready for next spring? If you have a compost pile now in your yard, don't forget to turn it over to prevent it from burning up.

Last, but not least, now is the time of year to look over your tools and machines for repairs and painting. "Don't put off till tomorrow what might be done today" makes a pretty good motto for us to hold up in our minds for the New Year.

M. A. C. CORRESPONDENCE COURSE

A course in the marketing of Farm Products is now offered by the Extension Service of the Massachusetts Agricultural College at Amherst. This course covers general marketing principles, also the marketing of apples, eggs, and dairy products. The course contains twenty-seven lessons and a fee of nine dollars is charged.

PROPER FEEDING FOR HIGH PRODUCING COWS

The owners of high producing cows cannot expect to get the most efficient results from their animals unless they use the proper feeds. By proper feeds, I mean those which are the most wholesome, and which can supply the needs of the animal according to her natural requirements in the most economical way.

The high producing cow is nothing more or less than a live machine, which takes crude material (grain, hay, silage, etc.) through the processes of mastication, assimilation, digestion and absorption, and finally gives forth the finished product—milk.

Just as in a manufacturing establishment, the quality and quantity of the final product depends upon the quality and quantity of material fed to the machine, so with the dairy cow. If you feed a cow inferior stuff, you must expect an inferior product. If you do not feed a cow enough of the right kind of food, you must expect the cow to be scanty on her product. "As you feed, so will you reap the harvest of the flow of milk."

Make Choice of Feeds

It is now evident that if a dairyman is going to apply common sense to his work, he must make a choice of the types of feeds and he must understand his cow as a live machine capable of turning crude material into delicious wholesome milk.

In making out his program, the farmer must have guides of operation, just as the factory man in running his machine, must have guides of operation. These guides of operation for the dairy farmer may be summarized as follows:

- (1) Always feed rich protein roughages with 20% protein grain rations.
- (2) Always feed medium or low protein roughages with 24% or better protein ration.
- (3) Always feed all the roughages they will clean up with relish. Do not expect the cow, however, to clean up inferior roughages.
- (4) Feed Jerseys and Guernseys approximately 1% of grain for every 3% of milk produced to take care of their high quality milk produced.
- (5) Feed Holstein and Ayrshires approximately 1% of grain for every 4% of milk produced.

The application of the foregoing guides to the feeding of high producing cows makes a practical program and keeps in mind that the dairy cow is a live machine. The animal's ability to produce milk is regulated by the quality and quantity of feed consumed.

HOME DEMONSTRATION AGENT

MRS. BUCKLEY WRITES HER FRIEND ABOUT THE NUTRITION CLASS

39 Northey St.
Salem, Mass.

Dear Jessie:

I received your letter and was so pleased to hear from you. I want to tell you all about the Nutrition Class held at my home. There were eight women in the class. We met every other Wednesday afternoon at 1:30 o'clock. I would receive a letter from Miss Crawford, our Home Demonstration Agent, on Monday telling me just what to buy for the class to use on Wednesday.

Every two had something different to cook. Miss Crawford would tell us to get the vegetables ready, our meat on cooking, and to prepare everything for the salad. While our vegetables and meat were cooking, we would retire to another room where Miss Crawford gave us a most interesting and instructive talk on vitamins and the common foods which are the valuable sources of minerals, the body-building and regulating foods, energy-giving foods. She told us that in planning our meals we must remember to use more milk, fruits and vegetables and coarse breads. We ought to use from one-half to one pint of milk a day and the children from one pint to one quart a day. We should cook two vegetables a day beside potato or plan on two servings of one vegetable and we ought to eat a lot more greens like lettuce and spinach. I was glad to know I should

use not only fresh fruit but dried and fruit I had canned.

She asked us to keep account of our meals and what they had cost and helped us to see where we had spent too much or too little.

After the instruction we again went to the kitchen, finished our cooking and made our salad under the supervision of Miss Crawford. She gave us a lot of recipes and every time we cooked something to help us use more milk and fruit and vegetables. We also made bread.

We elected a hostess who with the assistance of the other women set the table and prepared the meal. We all sat down and enjoyed ourselves eating the good things. We elected a secretary who found the total cost expended for the food used at the class and divided it by eight, giving us the amount for each person to pay for the food we bought. Each meal cost us about 30 cents apiece.

There were five lessons in all. At the last lesson Miss Crawford taught us how to set a table for a home dinner without the service of a maid. We enjoyed ourselves so much and learned such a great deal about cooking that we were all sorry when the course was over.

I am sure you would have enjoyed yourself if you could have been here. I hope you will write soon as I am very anxious to hear from you.

Wishing you and all your family a very Happy and Prosperous New Year, I remain

Your loving friend,
Theresa H. Buckley.

A Wise Woman Says

I DON'T WANT TO BE SUCH A GOOD HOUSEKEEPER that

I have no time to enjoy my children.
I am in danger of becoming a poor homemaker.
I am too busy to be a neighbor and friend.
My children's friends shall not always be welcome.
That an unexpected dinner guest will make me forget the true meaning of hospitality.
I cannot find time to be a pal and sweetheart to the only man in all the world.
I cannot become a still better and more efficient one by trying out new methods and labor-saving devices.
My children shall ever have just cause to think that I am hopelessly behind the times.
There is no time left to attend to my personal appearance.
I become near-sighted and fail to see that I have a housekeeping duty to perform in my community.
A few specks on my window pane will blot out my vision of the stars.

Adapted.

WHAT DID EXTENSION SERVICE MEAN IN 1924?

The Annual Report of the Home Demonstration Agents Tells Goal for 1925

For over five years the County Agricultural School has conducted as one of its efforts an Extension Service for homemakers. Today we find many women in the county who do not know what the Extension Department offers or about the work of the Home Demonstration Agent.

During 1924 thirty-eight communities in Essex County received help from the Extension Department. This help was given along the various lines of activities carried on in the home.

Five hundred and thirteen meetings have been held for the study of Garment making, Nutrition and Home Management, with an attendance of 6966.

Our reports show that 550 different women have attended Millinery classes with a saving of \$2009; 216 different women have studied Garment making, saving \$1075.

While Clothing for economic reasons has been the most popular subject, 72 women, realizing the importance of good food habits, have studied nutrition while 40 women were interested in the general care of the home.

Besides the definite classes conducted by the Extension Department, 12 meetings and exhibits have been conducted by the Home Demonstration Agent with an attendance of 915, while 57 homes have been visited where help has been given by the Home Demonstration Agent.

This work together with 1995 letters written and 356 telephone calls shows how some of the time of the Home Demonstration Agent and her assistants is occupied.

If every homemaker has passed on to others the information she has received, we feel that gratifying number of homes in Essex County have been reached by the Extension Department.

Goal for 1925

A greater interest in the health of the family.

A greater appreciation of the relation of nutrition to health.

More homemakers interested in better methods and better equipment in the home.

More communities reached and a greater variety of community activities.

A realization that a home is not ideal that does not recognize the four phases of life: Physical, spiritual, intellectual and economic.

COUNTY CLUB AGENT

A YEAR OF CLUB WORK

Annual Report—Registers Progress

At the end of each year it becomes the duty of your County Club Agent to make out an annual report. This occupation calls for the summarizing of the year's work. The officials at the 4-H Club office in Washington must know how much has actually been produced by Club members throughout the country. They want to know just how many chickens, pigs, and garden produce has been raised by the 4-H boys and also how many aprons, bread products and canned foods have been prepared by the 4-H girls. When these figures are compiled, they are positive proof of the value of club work among the youth of the nation and our national legislators are persuaded to appropriate the funds necessary for a continuance of the work. The report is also sent to the State officials who are in charge of Club Work.

The following extracts from the report will give some idea as to the extent of the work in this county. Covering a period of twelve months, December 1, 1923, there were organized 134 clubs of at least five members each. A total of 1121 boys and girls were enrolled in these clubs. The enrollment was entirely on a voluntary basis, so we may as well say that every one of these boys and girls were interested in agriculture and homemaking.

Joining a club involves the agreement by the member to carry on a definite piece of work alone, the nature and quantity of the work varying, of course, with the project and with the experience of the member. Of the above number who started the work, 799 finished all the requirements. This gives us a completion average of 72% which is a gain of 1% over the 1922-23 season. It might be mentioned that this gain was made in spite of a gain of 10% in membership. The larger the membership, the smaller the percentage of completion, usually.

The girls' work in clothing, food and canning, was done almost entirely by volunteer leaders. In all, 37 leaders gave their assistance in putting on the 4-H Club programs. Only four of these leaders received any financial return for their services, and in every case the funds were raised locally.

The towns and cities taking advantage of the work were Salisbury, Amesbury, Merrimac, West Newbury, Newburyport, Rowley, Methuen, Andover, North Andover, Boxford, Topsfield, Newbury, Byfield, Haverhill,

Groveland, South Groveland, Georgetown, Middleton, Danvers, Wenham, Beverly, Gloucester, Lynnfield, Peabody, Salem and Lynn. Twenty-seven out of a possible 34 towns and cities were alert to the benefits of the work.

Club work is not able to give a finished education, but it helps young people to discover their abilities and then encourages them to study further in agriculture or homemaking. This year, 14 boys who have been Club members entered Essex Aggie. There were at least two boys who entered college and several girls have taken advantage of the homemaking course at Essex Aggie.

Club work is a good starter!

The various projects and their proportionate enrollment and completion are shown in the block elsewhere on this page.

4-H CLUB WORK 1923-24

	Clubs	En-rolled	Completed
Garden Club	35	267	156
Dairy Club	0	6	6
Poultry Club	24	209	128
Canning Club	34	247	185
Clothing Club	33	325	261
Handicraft	1	9	9
Food Club	7	58	53
Totals	134	1121	798

ESSEX AGGIE STUDENT EGG-LAYING CONTEST

This contest is being followed by everybody at Essex Aggie with a great deal of interest, and some very good scores are being made by the birds.

There are 32 birds in the contest, 16 S. C. Rhode Island Reds and 16 Barred Plymouth Rocks. All pullets were hatched and raised on the School plant.

Each student in Instructor Moore's advanced poultry class picked his two birds from the school flock and are trap nesting them and keeping all records of feed consumed, costs of same, etc., for a period of five months.

For the month of December, the pen of Rhode Island Reds laid 229 eggs or 47.71%.

Bird No. 22 laid 28 eggs or 93%.

Bird No. 30 laid 25 eggs or 83%.

The pen of Barred Plymouth Rocks laid 169 eggs during the month or 34.35%.

Bird No. 16 laid 27 eggs or 90%.

Bird No. 10 laid 21 eggs or 70%.

TEAM WINS SECOND PLACE

Two Aggie Boys Make Good Try at Boston Show

A demonstration of home-made poultry equipment was successfully carried out at the Boston Poultry Show by Paul Hsley and Francis Eldridge of Georgetown. These boys are members of the 4-H Poultry Club of this school and were trained by County Club Agent DeQuoy.

Mr. DeQuoy planned the demonstration and prepared the outline, while the boys themselves constructed the various pieces of equipment used, such as feeding hoppers, drinking founts, etc. Frequent meetings were held to enable the boys to become thoroughly familiar with the demonstration. On New Year's Day, they gave the demonstration in competition with teams from every section of the State. During the twenty minutes which were allowed them, they worked out the following story:

"Farm Poultry Equipment"

The Poultry Club boys in small towns often need equipment and haven't the money to pay for fancy manufactured articles. They must build their own. Tools and material are limited so they must plan carefully.

An empty box from the grocery store measuring about 10" wide, 6" deep, and 15" long is transformed into a non-wasting mash hopper by tacking two slates across the bottom to prevent upsetting and making a grate of ¾" round pieces of green twigs with openings 3" across and set on the mash in the box to prevent waste.

The boys also showed how to use a 25-cent water pail to take the place of an expensive fount usually costing \$1.50 or \$2.00. Their method of making the pail remain upright was interesting. Then a catching hook was made from the wire hoop of a sugar barrel.

Naturally there was much work and explanation involved which does not come into their brief story of their demonstration.

The practical nature of their work and their familiarity with it, found favor for the boys and in competition with experienced, and well trained teams, they received second prize.

Sunlight is scarce in winter; why shut it out by cluttering the windows with various ornaments and by closing shutters and drawing shades?

HOME DEMONSTRATION WORK

New Year's Greeting to Homemakers of Essex County

"Like some good ship full fraught with precious things, may the holidays bring you a rich store of friendship, happiness and contentment.

And may the incoming tide of the New Year carry you far toward the golden shores of peace and plenty."

NEW ASSISTANT—CLOTHING SPECIALIST

Owing to the increased call for classes in Garment making, Miss Sabina Hanley of Amesbury has been engaged as an assistant instructor.

Miss Hanley is a dressmaker of experience and has taken the Teacher Training course required by the Vocational Department of the State Board of Education and is highly recommended by them.

Miss Hanley begins her classes early in the spring.

BETTER HOMES IN AMERICA

Is your community interested in the Better Home Campaign of which Herbert Hoover is President?

The Extension Department is working for Better Homes in its broadest sense and would be glad to help any community that would like to become a part of this big movement. It is a means of establishing a fine community spirit. The movement is forwarded through local committees by means of lectures, moving pictures, demonstrations, exhibits and various contests.

The Home Demonstration Agent will be glad to help in any way possible.

ARE YOU SHARING WITH OTHERS THE HELP YOU HAVE RECEIVED?

Professor Cole of the Massachusetts Agricultural College in his report of the demonstration in Food Preservation which he gave to two groups in Essex County last spring says that Essex County ranked third in the "number to whom information was passed on" and was in the "upper half" of the number of jars of fruit and vegetables preserved.

Seventeen women shared the help they received with 147 others and had preserved 1741 jars of jelly, jams, fruit and vegetables.

Are you passing on to your neighbor some of the help you have received through other activities of the Extension Service?

Dilute aged spirits by mixing with youth.

ESSEX AGGIE BOYS IMPROVE PHYSICALLY

Physical examinations of the first year class of the agricultural department show that the boys are in much better physical condition than when they entered the School last September. Mr. Oral A. Page, in charge of physical education, has kept accurate records of the physical condition of these boys and the results are worth noting. A large percent of the boys have increased their chest expansion and decreased their waist line at the same time. Their weight has increased an average of four pounds per boy.

The boys have physical classes once each week and their remarkable development indicates that they are putting into daily practice the instruction received from the physical education director.

SEASONABLE NOTES

Peach buds are in good condition this winter. The January thaw may affect them if of long duration. A spray of whitewash will keep the trees a little cooler.

Estimate your fertilizer and spray requirements and order early.

The Standard Market Box may be bought in the shuck and nailed together during odd hours, thus giving profitable employment for the all-the-year-round man.

Plan to start your pruning campaign early; spring will soon be upon us.

To increase the fertility of the bearing strawberry bed, put clear hen manure from the dropping boards on top of the winter mulch. This will be dissolved and washed into the ground by the time the mulch needs to come off. Hen manure applied this way does not burn the plants.

Putting acid phosphate on the dropping boards in the hen house absorbs the ammonia and makes the manure a complete fertilizer. This can be dried and stored without the usual loss of ammonia.

The market garden growers have already placed their seed orders and are thinking of "heat" now. And your hot bed sash glazed and ready for use? The price of glass is down now.

Tramping snow down around the fruit trees will prevent mice injury. Poison bait traps set in the fall should have proved effective. The way to get "bunny" is to visit the orchard or nearby woods with a gun.

Remember that the first requisite for good hatches and good chickens lies back in your hen house with the breeding stock. Keep them healthy and active. Be sure and provide them with cabbage or mangles, if possible. If not, the use of semi-solid or dried buttermilk is advisable.

Do not look over your incubator but look into it. Take apart the lamp and the heating jacket; thoroughly clean with hot water and soap. Make sure that everything is in good working order. Renew any parts about which you have any question.

Now is the time to plan just how you are going to feed these chicks when they arrive. Consult your grain dealer and make sure that he anticipates having a fresh supply of hard grains and starting feeds.

Better make sure that you are going to have available a supply of sour milk to give these chickens the first four weeks at least. Never mind the cost of this food, for you cannot afford to do without it for that length of time.

The price of hatching eggs and day-old chickens this year seems to be on about the same level as the previous three years, namely, \$8.00-\$12.00 per hundred for hatching eggs, and \$20-\$30 for day-old chicks.

SCHOOL NOTES

The annual Senior Ball was held on Friday evening, January 23rd. Despite the extreme cold weather, a large number attended and the dance was a success. The assembly hall was decorated with the class colors, green and gold, and music was furnished by the North Shore Festival Orchestra of Beverly. Just before the dance, the Essex Aggie Basketball team defeated a team from the Norfolk County School by a score of 20-7.

The Senior girls of the Homemaking department will prepare and serve a banquet to the football squad on February 6th. The student body and the School have contributed to insure its success and a good time is anticipated by the gridiron men.

Instructor Eastwood of the dairy division recently gave a talk to the 4-H Club boys at W. Newbury.

Mr. P. A. Gavin of Boston, agent of the King Construction company, gave an interesting talk on Greenhouses, before the assembly on Thursday, January 22d.

AGGIE WINS THREE STRAIGHT IN HOCKEY

Hockey

- Aggie 4—Beverly 1.
- Aggie 4—St. John's 2.
- Aggie 3—Dummer Academy 1.

Basketball Results

- Aggie 24—Manchester 23.
- Aggie 23—Alumni 1.
- Aggie 37—Methuen 28.
- Aggie 15—Haverhill 27.
- Aggie 20—Norfolk 7.

HOMEMAKING DEPARTMENT CURRICULUM PROVIDES FOR COMPLETE DE- VELOPMENT

The Homemaking School has a curriculum which is entirely unique and its own. Since there is nothing exactly like it, and because it is a home-making course, the School itself has a home-like atmosphere. From the time the instructors and students meet in the assembly hall in the morning for their opening exercises, to the closing bell at 3.30, there is a freedom and earnestness which comes from the fact that a group of girls who are vocationally inclined are happily engaged in the type of work which appeals to them and for which Nature intended them.

The aim of the School is to teach girls to become useful and intelligent wives and mothers, and to be efficient in the many lines of work that the home-maker of today is called upon to perform.

The curriculum includes beside sewing, cooking and millinery, such related subjects as dietetics, household management, and housewifery whose names indicate their usefulness, house planning which means a study of the building and furnishing of a home, both practically and artistically; household science and laundry work follow closely the cooking schedule and costume design follows the sewing program. A course in home nursing is given to the older girls, always by a registered nurse who instructs in treatment of the lesser diseases and accidents which are constantly occurring in every home, and also the feeding, care, and clothing of infants and children is thoroughly taught. Hygiene and physiology have a large place in the course and the students are taught to keep full accounts of their personal and household expenses.

As the cultural subjects are also a necessary part of the woman's equipment for life, they are also a part of the training in the Homemaking School.

English is studied during the entire course of three years and vocational arithmetic for one year. Geography, as related to the life of a home-maker, and history, the story of one's country as founded by our foremothers and forefathers form an interesting group of studies. Civics, intended to make good citizens of these women who will have such a great influence on our country's future, is also studied.

A very important part of the course is the home project. This means that each week every girl is given a cooking project which must be done at home entirely herself and also a monthly project in sewing.

These projects are assigned by the instructor and follow directly the School projects which have previously been taught, thus proving whether the subject has been thoroughly understood.

Physical education has an important place in the schedule; instruction is given in tennis, volley ball and basketball.

In this way, the School serves Essex County and the State in a most practical way by making the homes of its future citizens places of refinement and efficiency.

IMPORTANCE OF DRESS

There can be no doubt that clothing expresses personality in a remarkable degree and forms a not inconsiderable item in general self revelation. Careful attention to the details in personal appearance contributes directly to character building. Physical health demands attention to clothing, and mental health suffers from neglect of personal appearance.

The subject of dress is seldom viewed from the standpoint given above. Few realize how important to one's general outlook is the subject of clothes. Every person has the right to get the most out of life and if one feels that he or she is not dressed correctly, she cannot enjoy life as she should. If each one watches carefully for the small changes in the prevailing styles, clothes may always be kept correct at small cost.

A few points to be considered during this mid-winter season in millinery are, the satin hats in small shapes, fur trimming, silver and gold lace, small bows and fur ornaments on the top of crowns, small clusters of flowers and embroidery. A few hats in silk with parts of straw are being shown in Boston. The seasons are no longer separate as in years past, and often we might think that they are reversed.

Skirts tend to be shorter, and the straight lines are still shown in the newest styles.

We now think of clothes in the term of "Costumes" and not dresses and coats. We have learned that we must think of our costume as a whole to make the effect pleasing and complete, including even the so-called accessories, such as handkerchiefs, necklaces, bags and umbrellas, in order that the whole effect may be pleasing to the beholder and give a satisfied well groomed feeling to the wearer.

Oh, many a shaft at random sent
Finds mark the archer little meant!
And many a word at random spoken
May soothe, or wound, a heart that's
broken.

—Sir Walter Scott.

SCHOOL NOTES

On the evening of February 13th, the annual Junior Prom will be held at which time the Bristol Aggie Basketball team will be our guests.

The committee on Assemblies have planned to hold a speaking contest during the month of February. Students from both departments of the School will speak on "Great Men and Women of America."

A debate is scheduled to take place in March between the Homemaking and Agricultural departments. The topic selected is, "Resolved that the present days are better than the past."

Several boys from the freshman class are preparing two instructive plays which will be given before the assembly in the near future. The plays were constructed in the English classes and are entitled "The Cross-Word Puzzle" and "The Best Man Wins."

"TRIAL OF THE SOIL ROBBER"

The "Mock Trial of a Soil Robber" is the attractive title of a short entertainment suitable for presentation before a grange audience or other agricultural organization. The play has been prepared by the Extension Service of the University of Nebraska, Lincoln, Nebraska and may be obtained free of charge

BAUER PRIZE WINNERS

(Continued from Page 1)

The first Bauer prize was awarded to Miss Stella Burbine of North Beverly for the excellence of her summer project. Miss Burbine wished to demonstrate that she could put into use the principles which she had learned at school and so took a position in a home where there was a family of three, including an eight months-old baby girl.

The work was the usual routine of housework, including family cooking, sweeping, dusting and ironing. She also did the washing for the baby and cared for her during the afternoons. Beside this work, she helped shorten the baby's dresses as the short dress period was reached during the summer, and make a dress and underclothes for herself. Her employer was so well pleased with the work that she was sorry when the season ended and her helper returned to school. The demonstration was a success in every way, and once again it has been proven that the Homemaking Department of the Essex Agricultural School has a valuable place in the economic life of Essex County.



GRAFTING

The person as shown in our cut is apparently so thoroughly occupied in his work as to make it desirable to explain what he is doing.

Why so useful a practice as the grafting of trees has been allowed to pass into disuse is something of a wonder. It is an operation which can be easily learned and successfully practiced by anyone who has the interest of improved trees at heart.

There are many uses for grafting but the one which stands out most clearly is the extension and propagation of improved varieties of fruit. When a new or desirable variety has been obtained as the result of growth from seed, then it becomes desirable to propagate this variety in its exact form, preserving all of the valuable characteristics.

A few of the essentials for successful grafting may well be enumerated. The time for grafting is early spring. With apples and pears the period is March or April and even later if the scion can be kept dormant. There are many kinds of grafting in vogue. The commonest type, namely cleft grafting with older trees, is the most common. If one has seedling trees or has varieties which prove to be untrue to name or varieties which the market refuses to accept, it is possible to change these trees to suitable varieties by this method.

The actual operations consist in cutting away suitable sized branches, splitting the stub, insertion of one or more scions, and the covering with grafting wax of all of the cut surfaces. The operation is simple and the results are very quick and certain. Oftentimes a tree will produce more

abundantly on the third year after grafting takes place.

The tools required for this work are very simple: A fine-tooth saw, grafting chisel (an ordinary chisel will do), and a good sharp knife. The commercial grafting waxes are almost invariably excellent. If one desires to manufacture his own wax, the School will be glad to furnish a proper formula.

A few simple suggestions may be very helpful in performing the operation. When applying the grafting wax it is well to keep one's hands coated with a vegetable oil (linseed oil) rather than with an animal oil (lard). If the tree is of considerable size, it is better to re-work the top in two years rather than all at once. This proves to be a less shock to the tree.

One of the most useful forms of grafting which has been practiced considerably of late years is the bridge grafting to save trees which have been seriously injured by girdling of mice and rabbits. Budding is a form of grafting employed on young trees in the nursery row or in recently planted young trees. This is a form of grafting that is practiced in July and August.

The School would be pleased to furnish definite specific instruction concerning grafting or would gladly organize classes for instruction in this work.

GRADUATES IN THE NURSERY BUSINESS

A recent visit from Gardner Caverly, who is at present employed by the Breck-Robinson Nursery Company of Lexington, reminds us that a considerable number of graduates are finding this a profitable field. Bradford Burnham is in the landscape office of R. & J. Farquhar Company, having succeeded Gordon Woodbury. Mr. Burnham had previously had a long nursery and landscape experience at Tarrytown and Mamaronec, N. Y.

The Messrs. Batchelder and Henderson are in the T. C. Thurlow Sons' Cherry Hill Nurseries, West Newbury. Roberts is now employed at Dreer's Nurseries at Riverton, New Jersey and Wendell Oliver of the first class is an officer in the Moon's Nurseries, Morrisville, Pa. At least six undergraduates will be employed in nurseries this coming summer season.

DANGEROUS MIXTURES

Oxygen and oil.
Potassium chlorate and sulphuric acid.

Gasoline and a lighted match.
A pile of shavings and a live cigarette butt.

GREEN AND WHITE 1925

Editorial Board

The 1925 "Green and White" will make its appearance during the latter part of March. The book will contain the usual departments and enumerate the various School activities of the year. It is hoped to include a copy of the School song in this issue and a generous section of the book will be devoted to Alumni interests.

At a recent meeting of the senior class, the following editorial board was chosen:

Editorial Board 1925

Editor-in-Chief, James Silva, Jr., Rockport; assistant editor, G. Smith, Methuen; business manager, Andrew Coukos, Lynn; first assistant manager, Esther Meyers, E. Lynn; second assistant manager, Roland Plummer, Newbury; class notes editor, Harold Dowding, Methuen; athletic editor, Norman Morgan, Methuen; girls' athletic editor, Stella Burbine; art editor, Mary Scarlett, E. Lynn; exchange editor, Christine Gilman, Lawrence; joke editor, Forrest Carter, Wakefield; girls' joke editor, Ethel Thompson, Newburyport; alumni editor, Chester Hansen, Beverly; faculty advisers, Miss Louise Brightman, George E. Gifford.

ALUMNI (1924) NOTES

Wilfred Jordan is herdsman at the Argilla Farms, Ipswich.

Harold Wolfgram has charge of the poultry plant at the Crane Estate, Ipswich.

John E. Lombard is conducting a dairy business of his own in Ipswich.

Maynard Brown of Danvers and Guy Philpot of Beverly are both attending the Salem Commercial school.

James Curran of Danvers is in the employ of the farm department of the Essex County Agricultural School.

Arnold Oulton of Swampscott has charge of a poultry plant at Green Harbor, Mass.

Brooks Dwyer and Harold Wilson of Haverhill are employed at the Mass. Market Garden Field Station, in Waltham.

Charles O'Keefe is employed by Mr. F. H. Wilson at the Charles River Country Club in Newton.

Parker Ryan of Swampscott is regularly enrolled at the Massachusetts Agricultural College in Amherst.

George Sargent is operating his own dairy farm in Saugus.

J. E. Lombard, E. Roberts, W. Jordan and Charles O'Keefe with Instructor Eastwood made up the Alumni basketball team which was defeated by the varsity on January 14.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 6

HATHORNE, MASS., MARCH, 1925

No. 2

ANNUAL FARMERS' DAY

All Day Program Includes Speakers,
Trade Exhibits and Educational
Displays

The management have arranged what they believe to be one of the best timed and broad programs for the benefit of Homemakers, Farmers and Business men, which has ever been arranged. Condensed program:

Morning, 10.30—Educational Reel "Working for Dear Life." 10.50—Address, Commissioner A. W. Gilbert, Mass. Dept. Agriculture, "The Food Problem of New England." Discussion. 11.50—Mr. Stevens, District Manager of N. E. Tel. and Tel. Co., subject, "The Use of Electricity in the Transmission of Sound." The inauguration of President Coolidge will be broadcasted during this session in Agricultural hall.

Afternoon, 1.30—Mrs. Carolyn W. Bixby. "The Routine that Allows For Leisure," in the Homemaking building. 1.30—Prof. Richardson of the University of New Hampshire, subject, "Hatching and Rearing of Strong Chicks." Discussion. 2.15—Prof. F. C. Sears, Massachusetts Agricultural College, "The Ten Year Program for Massachusetts Fruit Growers." Discussion. 2.30—Mrs. Broughton of the Essex County Electric Club; subject, "Electricity in the Home," in the Homemaking building. 2.30—Meeting of the Essex County Poultry Association. President Lockwood presiding. Mr. A. W. Doolittle will give his experience of the last month in detecting and combating poultry diseases. A general business meeting of the Association will follow and at 3.00, a meeting of the Essex County Fruit Growers' Association, President Barnes presiding, will be held. Mr. Thies will discuss timely problems followed by general business meeting of the Association. 3.00—Mr. W. A. Munson, Director of the Division of Markets, Massachusetts, subject, "The Farm Roadside Market." After Mr. Munson's address, there will be an opportunity for a general discussion and answering of questions.

HOCKEY

Essex Aggie hockey team has had a very successful season in spite of the poor ice conditions. There is still a game with Swampscott High that we hope may be played. Some of the teams that usually play the Aggies have had to cancel their games because of poor ice.

ELEVENTH ANNUAL FARMERS' DAY TO BE HELD AT THE ESSEX COUNTY AGRICULTURAL SCHOOL Hathorne, Mass.

March 4, 1925

ALL-DAY PROGRAM

From 10.30 A. M. to 4.00 P. M.

Special Features

Addresses by

Commissioner A. W. Gilbert Prof. A. W. Richardson
Prof. F. C. Sears Prof. W. A. Munson

Women's Section Address by Mrs. Carolyn W. Bixby

Session Essex County Poultry Association

Session Essex County Fruit Association

ALL-DAY EXHIBITS

Trade Exhibits

Agricultural Implements and Supplies

Educational Exhibits

Homemaking Conveniences

Agricultural and Homemaking Displays

Farm Machinery Including Work of School Farm Shop

Trade and Educational Exhibits

The outstanding feature of the trade exhibits for this year's Farmers' Day, will be the co-operative electrical exhibit made by the electric power companies and the electric appliance dealers of the county through the Electric Club.

This display will be educational, both to the farmer and his wife, as it will show not only the best and latest household appliances, but farm power (electric) as well.

Quite a number of poultry appliances and feed dealers have already signed up for space so that we can assure you of a variety of exhibits in this line.

The fruit growers supply concerns will be with us with the up-to-the-minute equipment and supplies they are noted for. Several of them plan outdoor demonstrations—weather permitting.

Farm implement dealers will be right on their toes this year to bring home to you the need of good efficient implements for this season.

You can gain first hand information about hardware, paint and roofing while you are here. The display of these materials on Farmers' Day will exceed any you have seen here before. Our own trade people will be here to meet you, not only as merchants, but as friends, to discuss all manner of farm equipment problems. Avail

yourselves of this chance to find out more about it and apply the information you obtain to your own conditions. It is worth thinking about.

In the rear of the main school building will be an exhibit of some of the school farm operating equipment.

The home demonstration agent is planning a Health exhibit with special emphasis on overweights and underweights.

An opportunity will be given for visitors to ascertain their correct weight and height. There will be an exhibit showing the correct diet for overweights and underweights; posters, charts and bulletins will be of value to all parents who are concerned with their children's health. A mechanical exhibit sent by the New England Dairy and Food Council will show the route taken by a bottle of milk on its way from farm to doorstep. A stereomograph will illustrate Diet for Health.

There will be educational displays prepared by both departments of the School, including sewing, cooking, textiles, fruit, poultry and gardening.

Basket lunches should be provided by the visitors. There will be an opportunity to buy coffee at the School.

There will be no school session March 4th, but, instead, the doors will be open wide to welcome all who can come. Mark, March 4th on the calendar, and make a special effort to attend.

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

A BI-MONTHLY PUBLICATION SUBSCRIPTION FREE

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Secretary-Treasurer

CALENDAR

Mar. 4—Eleventh Annual Farmers' Day at School.

Mar. 6—Third term ends in Agricultural Department.

Mar. 6—Third term ends in Homemaking Department.

Mar. 21—Boston Market Gardeners' Association at School.

May 4—Agricultural Projects begin.

June 4—Better Homes Day.

June 10—Parents' Day for Homemaking Department.

PRIZES

Prizes have been offered annually by Mr. and Mrs. Bauer for the purpose of emphasizing and stimulating project and summer work. These have been a most wholesome and far-reaching influence in causing students to carry into practice the work which has been given them by the project teachers.

Quite recently, the School has been very fortunate in having three new sets of prizes, the first set to be known as the Governor Endecott prizes; another, the Alumni prizes, and again, the Gertrude McCormick prizes.

A school as supported by public funds usually does not fare as well as a private school in the matter of prizes and endowments. Furthermore, a new school, and this would perhaps still be classified in this light, seldom is so fortunate, therefore, all well-wishers of this School and particularly the student body are to be congratulated in our good fortune.

AGRICULTURAL CURRICULUM

Includes Academic, Related and Vocational Subjects

In considering the possibility of sending a boy or girl to Essex Aggie, parents should understand just what the type of study is in order to appreciate the opportunities offered by this School in comparison with that of other schools. It is with that thought in mind that the writer offers the following.

There are two different courses offered in the Agricultural Department, one of four years, and the other, three years. The latter is open to students who have had two or more years of study in High School. The former is open to all who have completed a grammar school training or its equivalent.

The students' time in school is evenly divided between studies in agriculture, and related or academic subjects such as English, Science, Arithmetic and Accounts, Hygiene, Farm Shop, Marketing, Farm Management, American History, Civil Government, etc. Not all of these are offered each year, but some work in each is required during the four years that the student spends in the School.

In agriculture, courses are offered in several different lines, including Poultry, Fruit, Small Fruit, Dairy Farming, Farm Crops, Vegetable and Market Gardening, Ornamental Gardening and Floriculture. Every student is required to study Vegetable Gardening his first year in School, because it offers such an excellent foundation upon which to build other work in agriculture. Opportunity is given after the first year to train for specific objectives and to accomplish this, students are permitted to elect such combinations of courses in agriculture as will best train them for that work while still giving them a fair knowledge and training in general farm work. This is one reason why Essex Aggie has been able to turn out in the past, skilled poultrymen, dairy farmers, market gardeners, private estate foremen, etc.

An exceedingly important phase of the course of study, is the practical experience side. Much of the class time in agriculture is given over to practical work, while the entire summer is devoted to project work on the student's home farm, in employed positions upon the School farm or with many farmers and estates throughout the county. This summer project work is required of all students and is thoroughly supervised by project instructors throughout the period that classes are not in session.

It will thus be seen that a student may earn while he learns and the entire year is spent in a most profitable way, whether viewed from the educational or any other point of view.

Inquiries for further information

HOMEMAKING NOTES

The Following is the Honor Roll for the Quarter Ending January 30, 1925

The following students have received an average of 87% or over:

Helen Boyd, Danvers, 90.6; Ruth Gould, Merrimack, 90.5; Virginia Davis, West Newbury, 90.3; Sarah Burnham, Essex, 90.2; Jean Blake, Gloucester, 90; Ruth Erickson, Danvers, 89.6; Marjorie Hawkes, Danvers, 89.6; Arline Pilkington, Methuen, 89.4; Christine Gilman, Lawrence, 89; Dorothy Matheson, Lawrence, 88.7; Gertrude Smith, Methuen, 88.6; Elizabeth Hutchinson, Nahant, 88.5; Rae Reid, Georgetown, 88.5; Margaret Knights, Salem, 88.4; Florence Mason, Marblehead, 88.3; Helen Luscomb, Lawrence, 88.2; Evelyn Scobey, Danvers, 88.2; Hilda Noyes, West Newbury, 87.8; Catherine Dow, Newburyport, 87.7; Lillian Pizzello, Beverly, 87.7; Emma Rix, Danvers, 87.3; Thelma Lyle, Andover, 87.1.

The Homemaking Department furnished part of a program for the entertainment of Chebacco Pomona Grange which met at the School on Wednesday, February 18th.

The program furnished by the School was as follows:

Selection Orchestra
Table Service.....Evelyn Scobey, Danvers
Talk on Sewing

Gertrude Smith, Methuen
Selection Glee Club
House Planning

Sarah Burnham, Essex
Selection Orchestra
Well Balanced Meals

Rae Reid, Georgetown
Selection Orchestra
Composition of the Egg and

Formation of the Chick in
the Egg George Ward, Lynn
Clothing Exhibit

Miss Browne and Ten Students
Exercise Dance, School Song

Twelve Girls
Selection Orchestra

The students in the Homemaking Department are to furnish the afternoon program at Essex Pomona Grange which meets at Andover on Thursday, March 5th. There will be music, essays by the students, a clothing exhibit and some physical training. The object of the entertainment will be to show what the School aims to teach and some of the results.

will be answered at any time and should be addressed to the Director or Educational Manager. Visitors are always welcome to the School, winter or summer, and a visit will do much to make clearer the possibilities for training. With the addition of the new greenhouse and the reconstructed poultry plant the facilities for instruction in all lines of agriculture now rank with the very best.



EXTENSION SERVICE



WHEN YOU SERVE LETTUCE

Make Salads Attractive to the Children

Many children refuse to eat lettuce for the reason that it "tastes like grass" or that they "just don't like it." Nor are cabbage, spinach and others of the "greens" family generally popular with growing youngsters, who should be eating these leafy vegetables, which are rich in vitamins.

Mothers who realize the importance of a suitable diet in the making of sturdy children, consider it worth while to make these often unpopular greens so palatable and attractive that their boys and girls will learn to like them.

The possibilities of a firm head of lettuce are almost endless. With the kitchen scissors shred a quantity of crisp lettuce leaves which have been washed and wrapped in a cloth to absorb the moisture. For individual service arrange in nests on plates, and place in the center of each three little "eggs" made of Dutch cheese, salted and moistened with cream. After placing the cheese balls, dust them lightly with paprika. The scarlet of the spice on the white cheese in contrast to the vivid green, makes a pretty dish which is sure to please the average child.

Instead of the cheese balls, a hard-boiled egg may be placed in each nest; this may be left plain and dusted with paprika, or colored with beet juice. Serve with the egg salad mayonnaise, boiled dressing, or a French dressing made by stirring together oil and vinegar, or lemon juice, with a seasoning of salt, sugar, paprika and a bit of dry mustard.

By way of variety, shredded lettuce may be combined with minced onions and radishes, or finely cut celery, or with diced cooked beets or carrots, and mixed with a French dressing. Lettuce wilts very quickly, so the dressing should not be added until just before serving. It is better to pass the dressing at the table.

If lettuce is not on hand, cabbage finely shredded with a sharp knife or slaw cutter may be substituted for it.

Salad Suggestions

1. Chopped apple, celery, cabbage and grated raw carrot.
2. Prunes stuffed with peanut butter or pimiento cheese or raisins.
3. Equal parts of chopped raisins, peanuts and celery.
4. Tomato stuffed with pineapple cubed or shredded and chopped nuts.
5. Diced apples with cottage cheese formed in balls, and nuts.
6. Raw carrot, peas, peanuts, celery.

BETTER HOME STANDARDS

Let men and women alike work to establish better home standards, so that there will be the right farm home on every farm in Essex County. Let every home be

"Economically sound.
Mechanically convenient.
Physically healthful.
Morally wholesome.
Mentally stimulating.
Artistically satisfying.
Socially responsible.
Spiritually inspiring.
Founded upon mutual affection and respect."

WHO WANTS THE EXTENSION LIBRARY NEXT?

Many women of the county do not know that the Extension Department owns a library of Home Economics books which may be borrowed for an indefinite period, free of charge.

These books may be placed in the Town Library for distribution or may be loaned to any club or group of women. They are especially valuable for the small community where the appropriation is not sufficient to purchase books of this type.

The following is a partial list of books included in the library. If you are interested, write or telephone to Miss Marion P. Crawford, Home Demonstration Agent.

Food

Food for the Family Rose
Economic Cooking Gibbs
Food for the Worker.....Stern & Spitz
Food Values and Economical Menus
Successful Canning and Preserving Bradley
Practical Dietetics Powell
Good Proportions in the Diet Pattee
U. S. Dept. of Agriculture
Clothing and Household Management.
Table Service Allen
The Efficient Kitchen Child
The Guide to Laundry Work

Chambers
The New Housekeeping Frederick
Clothing for Women Baldt
The Successful Family Life.....Abel
The Art of Home Furnishing and Home Decoration Parsons

Better Homes Day, June 4th.

Already the Home Demonstration Agent has been asked several times, "When does 'Better Homes Day' come this year?"

Thursday, June 4th. is the day! Be sure and mark that day on your calendar.

LEADERS' MEETING A SUCCESS

Essex Aggie Entertains 4-H Club Helpers

The backbone of 4-H Club work is the local leader. The truth of this statement cannot be challenged by any one who understands club work. The local leader is the "first line," the actual worker, the self-sacrificing individual. Without them club work could not live.

The offices of the State and County Club officials are to provide these leaders with the tools used in their labors. This can be accomplished in a small measure by mailing materials to the leaders. A limited number of personal visits can be made and to a still more limited extent conferences of a few leaders can be arranged in various sections of the country. More and more has been done along the line of county-wide local leader conferences and this year the time seemed ripe to have such a gathering for Essex County. The date set was Feb. 7th.

The trustees of Essex Aggie are actively interested in 4-H Club work and they made the affair attractive in every way possible. The use of a room, a movie machine and operator, a fine lunch and financial assistance on the matter of transportation were the practical ways they took to prove their interest. Director Smith welcomed the leaders in a way that made them feel the appreciation of the County for their kind assistance. Mr. Denman was very obliging in the matter of projecting the movies which were part of the program. To Miss Alice Coleman of Peabody belongs the credit of preparing an excellent lunch for the conference.

The Homemaking Department was the scene of the meeting which opened at 10:00 a. m., with a short address of welcome by Director Smith. County Club Agent DeQuoy then brought out the purpose of the meeting as being called to supply the leaders with helpful material to take back to their clubs. Miss Harriet Woodward, assistant state club leader, then gave a sketch of the history of club work and stressed the real objectives to work for. After her address, the Essex Aggie movie projector threw upon the screen the film "Big Gains for Little Bodies." This picture admirably fitted the better-food-habits part of the Club work as brought in by the Health H.

The next event was of great interest to all. Assisted by a club of five High school senior girls, Miss Marion Parker conducted a model club meet-

(Continued on page 4)

CARE OF CHICKS WITH BROODER STOVES

Methods Used at the Essex County Agricultural School

FIRST WEEK

Operation of brooder stove: Fill full of coal, morning and night. Shake down and remove ashes at same time.

Temperature: At outside edge of hover two inches from floor 90 to 95 degrees. Room temperature five inches from floor, 65 to 75 degrees.

Litter on floor: Two inches of sand or gravel, one inch of fine cut hay, clover, alfalfa or shavings.

Guard of wire or cardboard: Place one foot high chicken wire or cardboard around hover, one foot away from the hover.

First day: Sour milk, also grit, shell and charcoal. Never let chicks be without these afterwards.

Second day: Remove guard. Feed any kind of fine ground starting feed, buttermilk feed, etc., two times, for one-half hour each time, placed on boards. At noon, place water before them with chill taken off; take away at dark and do this each succeeding day.

Third day: Starting food, one hour, two times.

Fourth day: Starting food, one hour, three times.

Fifth day: Starting food, before them all the time from now on. Feed small amount of chick scratch grain. Scatter in litter two times.

Sixth day: Small amount of chick feed three times in litter.

Seventh day: Small amount of chick feed five times in litter.

The Essex County Chick Scratch Grain

200 fine cracked corn, 100 fine cracked wheat, 100 fine cracked pin-head oats.

SECOND WEEK

Hover temperature at outside edge, 85 to 90 degrees. Room temperature, 60 to 70 degrees.

Feeding: Commercial buttermilk starting feed before them in hoppers all the time. Chick scratch grain five times a day thrown in litter. Sour milk all the time. Water all the afternoon.

THIRD WEEK

Gradually substitute home-made mash for commercial starting feed, the home-made mash being made as follows: 100 bran, 100 middlings, 200 corn meal, 45 rolled oats, 50 to 75 lbs. beef scraps (50 if they have sour milk all the time. 75 if milk is not available all the time.) Scratch feed five times a day in small amounts, made up as follows: 100 chick scratch grain, 50 whole white wheat, 50 regular cracked corn.

Green feed: Sprouted oats, cut-up mangles, cabbage or lettuce.

FOURTH AND FIFTH WEEKS

(Same as Third)

By the time chicks are six weeks old, they can be fed about the same feed as the laying stock.

The above methods have been used for several years at the school and also in many places about the county—with great success.



Early Chicks at the Poultry Plant

LEADERS' MEETING A SUCCESS

(Continued from page 3)

ing involving business, reports and a demonstration of the care of clothing. Miss Parker leads the home economics clubs at the Beverly Health Center and is well versed in the ways of handling the groups. Several new ideas were gathered by the leaders who saw this demonstration.

After lunch the leaders divided into two sections. Those interested in clothing work met with Miss Woodward, who discussed new practices in sewing. Miss Edna Rundquist, cooking instructor at Gloucester High and also food club leader, led in the food club discussion. There were twenty-five present at the conference. These leaders gave up Saturday in order to be better able to direct Club work. The success of the meeting certainly warrants the planning of another such meeting next year.

TRY THE EASIER WAY

There is an easy way to do things, just as there is a hard one. The back need not ache, nor the feet burn, nor the nerve twitch. Escape lies by way of a few simple rules which have revolutionized conditions in our big factories. They can create new and happier conditions in any home. They are these: (1) Get rid of poor and superfluous tools; (2) Arrange your tools in the most convenient places; (3) Avoid awkward methods; (4) Stop to rest whenever you find yourself running slow and blundering.

AGRICULTURAL ENGINEERING

Farmers Now Using All Branches of Engineering Knowledge

When a farmer buys a plow he buys the services of mechanics, inventors, and engineers ready made in a product which he can load into his truck, take to his farm and put into use. He knows what the cost is, he has a tangible thing before him and he can estimate what it will do for him, so it is with other farm machinery including the tractor and the automobile. The farmer has in this way been making use of the services of mechanics and mechanical engineers for many years. More lately he has been buying the services of electrical engineers in the form of electric lights and motors, telephones and radio.

There are two types of engineers which the farmer has not made much of—not because they could not be very useful to him, but because, it seems, that he cannot buy their services "ready-made." These are the civil engineer and the architect. Any jobs which he has for them require "made-to-order" service.

Employment of "made-to-order" service is more expensive than buying the "ready-made" service. Another reason why farmers have not employed such service much, is because it has not understood the farm side of the problem and so could not serve very well.

There has developed within the last few years a new type of engineer, who not only understands the engineering side of such problems, but also understands farming and knows how to work out the farmer's engineering problems in a practical way. In the case of a drainage project, he knows not only how to do the necessary engineering work, but also can advise on the practicability of the project from a farm management standpoint. He understands soils and so can plan the drainage system to take care of the peculiar soil conditions of the case. This Agricultural Engineer, as he is called, also assists farmers in the planning of new buildings or changes and repairs to the old ones. He tells, when requested, the size that a rafter, beam or joist should be for a particular set of conditions as well as answers the numerous other questions that arise in building construction. In water supply, sewage disposal, irrigation, farm shop equipment and electrification there are problems which he is prepared to solve. In short, he brings from all the branches of engineering, knowledge desired by the farmer and adapts it to the peculiar conditions of the farm.

ESSEX FARMER AND HOME MAKER

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Vol. 6

HATHORNE, MASS., MAY, 1925

No. 3

SALAD TIME

Summer Food Suggestions As Taught in the Homemaking Department

The salad is one of our most adaptable foods; as a matter of fact, it has a definite place in nearly every type of menu. Luncheon, supper, dinner, and party refreshments all need the right salad touch.

The word salad conjures up in the minds of many housewives one of two pictures—either the vinegar-drenched common garden lettuce, so often misused, or the elaborate refreshment salad which appears on formal occasions.

There are dinner salads—the simplest type made up of deliciously crisp salad greens, with or without the addition of cooked or uncooked vegetables, which are unusually dressed at the table and variations of French dressing being most generally used.

Then there is the luncheon or supper salad which may include various ingredients, such as leftover meat or fish, hard cooked eggs, cooked and uncooked vegetables, cheese and various other foods. In this case, the salad is a meal in itself and mayonnaise or cream dressing is used for garnishing.

The dessert or sweet salad, which includes delicious fruit combinations with which we are more or less familiar—the frozen salads—and the salad of jellied fruits and nutmeats—then we have in addition the familiar salad of chicken, lobster, or crabmeat with celery or diced cucumbers used as extenders and mayonnaise dressing to complete the dish.

The character of the dressing should be dictated by the place of the salad in the meal. All light vegetable salads which are to constitute one course at dinner, should be served with French dressing or one of its derivatives. But when served as a main course, it is customary to serve mayonnaise—or cooked dressing with cream. If salad ingredients are fat and very rich, the boiled dressing should be used. If deficient in fat, the mayonnaise combines well dietetically. If a sweet dressing is used, the salad should act as dessert rather than a separate course.



A Class Exercise—Homemaking Department

Whenever and however the salad is used, it has a definite place in the menu. It is not an accessory. It is not a luxury. It is a definite food, a definite necessity.

SALAD SUGGESTIONS

Mayonnaise, or cooked dressing may be used with the following combinations:

Waldorf Salad: 1 c. apples, 1 c. celery, $\frac{1}{2}$ c. walnuts.

Tomato Jelly: Tomato juice, seasoning and gelatine.

Shamrock Salad: Green pepper, cream cheese.

Mock Lobster: Cold flaked cod or haddock, pimiento and French dressing.

Water Lily: Hard cooked eggs, cut in lily shape, garnished with pimiento and dressing.

Prune Salad: Prunes stuffed with pecans, whipped cream.

Banana Salad: Bananas rolled in ground nuts.

Asparagus Salad: Asparagus, rings of green peppers, slices of pimientos.

(Continued on page 7)

DECIDE NOW

Early Applications for Enrollment Desirable

Every boy or girl who is interested in agriculture or homemaking and intends to prepare for these vocations by taking the course offered at Essex Aggie would do well to get in touch with the school authorities at once. For the boys especially this is desirable in order that they may be urged and assisted to start their work in vegetable gardening this summer.

To the boy who applies for admission now the school offers the services of its vegetable gardening instructors for guidance in carrying on a project this summer. Why before entering the class room year may be asked? Because by so doing he will lay a foundation on which may be built a more successful year in school. Nor should it be limited to vegetable gardening. The more a prospective student comes in contact with animals, plants, and general farm operations before entering school, the more profitable his school work here will prove to be. The experiences

gained during the summer and the problems raised in connection with them, become live topics for consideration during the year to follow. It would be well to note these problems in an observation notebook to which reference can be made later.

Essex County needs to have its farms made more productive and more of them, in common with other eastern counties. The way to do this is to learn the agricultural vocations and how to farm profitably under our Eastern conditions. This school is yearly sending back to the county a few to start in on their own farms as well as many others trained for positions of responsibility such as herdsmen, poultrymen, farm foremen, gardeners, etc. Essex Aggie offers this training in agriculture and homemaking to boys and girls who are 14 years of age or more along the following lines:

Market gardening, Poultry, Dairying, General Farming, Fruit, Floriculture, Ornamental Gardening, Farm Forestry, Dressmaking, Millinery.

(Continued on Page 2)

Essex Farmer and Home Maker

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William B. Moore R. H. Denman
C. M. Stearns Marion P. Crawford
J. E. Eastwood Ella S. Morrill
E. E. Metcalf A. W. Doolittle

CALENDAR

- June 4—Better Homes Day at Hathorne. In charge of Home Demonstration Agent.
- June 10—Parents' Day in the Homemaking Department. In charge of Mrs. Ella S. Morrill.
- July 27—Farmers' Week at Mass. Agricultural College.
- Aug. 5—Market Gardeners' Field Meeting at Waltham.
- Aug. 4—7 Conference of Mass. Agricultural Teachers at Hathorne.
- Aug. 19—Chebacco Pomona Field Day at School.

EDITORIAL

ENROLLMENT

At this time of the year this School is very much concerned about the candidates for admission to the new classes in September. We employ all reasonable methods for obtaining the names of boys and girls who wish to receive the benefit of the training in the field of agriculture and homemaking which is so generously offered by the citizens and tax payers of Essex County through the School.

With the above end in view, the School is entertaining the Superintendents and the grammar and Junior High principals of Essex County at the School in order that they may make a first-hand study of the work of the various departments and divisions. This has been a very helpful effort and already names of prospective candidates are being received.

To grammar school graduates the School offers a four-year course in the

various branches of agriculture, namely dairying, fruit growing, poultry, vegetable and ornamental gardening and floriculture, while for the more advanced students a similar course covering a three-year period is offered. All students are obliged to do productive and remunerative work during the summer months of the year, thereby enabling them to be largely self-supporting. General educational subjects are also taken up.

Any girl living in the County who has completed the eighth grade or two years in Junior High is eligible for entry in the Homemaking Department. The regular course is three years. There is a two-year course for girls who have completed two years in High School and a Special course of one year for graduates of a High School. The principal subjects taught are Cooking, Sewing and Millinery with such related subjects as Dietetics, Textiles and Household Science. Besides these subjects, Physiology, Home Nursing and Care and Feeding of Children as well as the academic studies are included in this course.

Residents of Essex County are entitled to free tuition. Prospective students and visitors are welcome at all times.

WHITE PINE BLISTER RUST CONTROL

Intensive educational work for the protection of White Pine in Essex County began May 1, 1922. Since that date 21 towns have been offered service. 1,136 owners have cooperated and their pines protected, 62,392 acres have been examined, 259,339 wild currant and gooseberry bushes (Ribes) have been found and destroyed, and 8,430 cultivated currant and gooseberry bushes (Ribes) have been disposed of.

The remaining towns will be visited this year and all cooperative Blister Rust control work will be finished October 1, 1925. After that date no further financial, Federal or State assistance will be available for Essex County.

All owners of Pine lands who have not received assistance and wish to avail themselves of same should apply at once, giving total acreage of holdings, number in pine, mixed pine and hardwoods or sprout land coming into pine, and mail to William T. Roop, Federal Agent in Charge, Essex County Agricultural School, Hathorne, Massachusetts.

PARENTS' DAY
in the
Homemaking Department

Wednesday, June 10th
10.30—3.30 p. m.

Fathers, Mothers and Friends are
Cordially Invited

VEGETABLE STANDARDS

Boston Market Gardeners Take Progressive Step

At the February and March meetings of the Market Gardeners of the Boston District, steps were taken towards standardizing several of the outdoor vegetables, namely, cucumbers, tomatoes, lettuce, celery and carrots. The standard set for fancy cucumbers is: Uniform shape and size—not less than six inches long, good color and qualities characteristic of the variety.

The standard for fancy grade tomatoes is: Not less than two inches in diameter, uniform size and color and free from blemishes and imperfections.

An eight-ounce head of lettuce was set as a standard for the best grade: heads to be uniform and practically free from blemishes and imperfections.

The standard set for a fancy box of celery: Bunches to be uniform and practically free from blemishes and imperfections.

Carrots of fancy grade should range from one and one-quarter to two and one-quarter inches in diameter, box should be packed with uniform roots practically free from blemishes and imperfections.

Boxes containing these fancy vegetables should be marked with the Association's label—"Vita Viga."

By setting standards for these five vegetables, the Boston Market Gardeners' Association has taken a step in the right direction and such action will result in the production of a more uniform product. If the standardization of these vegetables proves advantageous to the growers, the Association plans to standardize other vegetables.

DECIDE NOW

(Continued from Page 1)

Home Cookery, Home Nursing, House Planning, Home Ornamentation, Care of Children, together with other related subjects and general academic education.

Students may be enrolled as regular four year or three year students in the agricultural department and as three year, two year, or one year students in the Homemaking department, the classification depending wholly on the amount of previous schooling.

Prospective students, their parents, or interested friends are urged to visit the school early in the year, as the best way of determining whether or not a boy or girl should be enrolled here for the coming year. Do not delay until just before school opens, in early September.

Applications for enrollment should be made to the Director at the school, Hathorne, Mass.

CONTROLLING POULTRY DISEASES

Preventive Measures Will Insure Success

Many poultrymen around the state, in view of the prevalence of poultry diseases the last few years and especially the past winter, are endeavoring to correct the trouble by a campaign to raise birds that are healthy, vigorous and free from infectious diseases. This effort should prove successful and will enable many poultry plants now in a dangerous way to carry on their business successfully.

The following points if carried out faithfully will insure success in this project:

1. Use for breeders only birds selected for constitutional vigor and freedom from Bacillary White Diarrhoea. Otherwise purchase certified chicks or other chicks known to be of superior worth.

2. Select for the season's brooding and rearing ground, a plot of land not recently used by poultry (two whole years at least) and upon which poultry manure has not been spread. Clean ground is of vital importance. Keep chicks fenced off old land.

3. Thoroughly disinfect brooder houses and equipment before moving onto clean land. This means: (1) Scrape and sweep out all visible filth; (2) Use corrosive sublimate at the rate of two ounces to fifteen gallons of water to soak down the brooder floors and part way up the walls; (3) Then spray or whitewash the entire house. Use 3-5% solution of some standard disinfectant or add one pint disinfectant to each gallon of whitewash or use Carbola; (4) Then brooder houses are ready to be moved onto clean land and not before!

4. Remove chickens directly from incubators to brooders. Take reasonable care in brooding not to carry (on feet or otherwise) contagion from adult stock. If you had paralysis in your flock this year, have a special pair of rubbers to wear on the brooding range or a pan of strong disinfectant in which to step before entering the range. Keep other people out of your range!

5. Do not confine chickens to small yards long enough to wear the sod off. This causes contamination. If the ground around the house does get bare, sweep up the accumulated manure before a rain and avoid trouble. Do not overstock the range or houses. Five hundred pullets to the acre is the maximum. Have ample supply of green feed even if it is necessary to plant rape outside and throw it into the yards daily.

6. An added precaution: When the chicks are 12 weeks old, add two pounds of tobacco dust (containing at least 1½% nicotine) to every 100 pounds of dry mash. Keep this up for

three weeks. Feed it dry. CAUTION: It is best to mix not over a week's supply of mash at a time as the tobacco dust rapidly loses its strength. Keep the dust in sealed containers.

7. Repeat the tobacco dust treatment for three weeks before pullets are put into the laying houses.

8. The laying houses should be thoroughly cleansed and disinfected before the pullets are put in them in the fall. Disinfection should be done twice as in three. In case of dirt floors, the surface must be removed and corrosive sublimate solution used at the rate of one gallon to every 10 square feet of floor space before refilling with clean sand. (For example, hen house 16x20 will need 32 gallons of solution.) Better still, level off your dirt floor and put in cement. It is not only safer, but it saves hours of hard labor every year.

9. Pullets should be confined to the laying house until adjoining yards are properly sterilized or cropped for at least one full season.

10. For men who cannot use new ground: (1) Disinfect brooder houses as in three. (2) Disinfect every inch of the yard where chicks are to run with corrosive sublimate solution at the rate of one gallon to every 10 square feet. At best, this is a poor as well as an expensive system. It will work, but disinfecting must be carefully done! Follow steps in program as outlined above.

WEIGHT OF CHICKENS

Week by Week

Poultrymen are always anxious to know if their chickens are up to weight according to age and breed. The following table will give a good check, week by week, for Rhode Island Reds and Leghorns.

Age Week	R. I. Reds	W. Leghorns
0	.082 lbs.	.081 lbs.
1	.115	.116
2	.162	.180
3	.264	.262
4	.364	.381
5	.538	.506
6	.737	.695
7	.962	.902
8	1.228	1.09
9	1.525	1.22
10	1.805	1.41
11	2.014	1.56
12	2.29	1.80
13	2.38	1.93
14	2.56	2.05
15	2.76	2.20
16	2.90	2.36
17	3.13	2.48
18	3.26	2.63
19	3.43	2.72
20	3.67	2.89
21	3.85	3.05
22	4.03	3.12
23	4.16	3.22
24	4.29	3.28

MARKETING BROILERS

New York Market Pays More. Shipping Regulations

According to the Massachusetts Agricultural College many early hatched broilers have already been shipped from Massachusetts to live poultry markets of New York City. In the next few weeks many thousands more will be ready to go, for this year Massachusetts and New Hampshire are raising more winter chickens than ever before.

Why do New England broilers, especially early ones, go to New York instead of Boston? Because New York pays more. For years practically all New England broilers, as well as fowl, came to Boston. Two or three years ago it was noted that many broilers received in Boston were re-shipped by commission men and wholesalers to New York City. Upon inspection market price quotations from New York were found to be higher. Poultrymen made trial shipments and although express costs were greater, they received higher net returns. Now, two New York poultry houses have buyers permanently located in New England territory and a large proportion of our stock is going their way. Most New England poultrymen had rather ship to Boston, but money talks and the New York dealers are making themselves heard.

Shipping Regulations

Connecticut is the only New England state mentioned in the New York embargo. Other New England states are free to ship to the New York market, but since the quarantine order is rather ambiguously worded, it is a wise precaution for shippers to prepare and sign a certificate to accompany each shipment. This certificate may read something as follows:

Place Date

I hereby certify that the accompanying shipment of live poultry consigned to is free from the disease known as European Fowl Pest and other communicable diseases and that said disease does not exist in the premises where this poultry originated.

Signed Shipper.

One way shipping crates should be used. A very fine crate may be purchased in small lots for 65 cents or 55 cents in carloads. If the regular return shipping crate is used, it must be new or cleansed and disinfected under the supervision of a representative of the United States Bureau of Animal Industry and must bear a tag certifying to such disinfection. Obviously this is quite impractical. Furthermore, those crates may not be returned for some time because of the quarantine regulations.

HOME DEMONSTRATION AGENT

SAUGUS LADY EXPLAINS WORK OF NUTRITION CLASS

To the Essex Farmer and Homemaker:
I wish you would broadcast through your paper the splendid, helpful work that has just been started here in Saugus.

Wednesday, the dates are marked in red ink by the Saugus housewives, is the day of the meeting and the first hour is the theory lecture when the vital subject of food values is laid bare. Mature matrons and newly-weds learn about foods that are rich in bone-building, muscle-making and health-restoring minerals. Dairy products, succulent vegetables, fruits, cereals, eggs—foods that are rich in protein, lime, iron and phosphorus are especially stressed by Miss Crawford for the daily use in the homes. After such searching questions as:

"Does your child get a quart of milk daily?"

"Do you use a pint of milk daily for each adult in the family?"

"Do you eat fruit twice each day?"

"Do you eat some raw food each day?"

"Do you drink six cups of water each day?"

one is ashamed to admit that coffee, meat, fried foods and pastries occupy such a prominent place on the home table.

Judging by the copious notes taken and the multitudinous questions asked the theory hour has given to the housewives a wholly new slant on the health value of foods, and has convinced them that correct eating is the principal road to health. Never again will they agree with the old sea captain who said "Put it under a crust, Gal, put it under a crust."

Incorporated also in this talk-fest hour are discussions on the kitchen as our work shop, correct table setting and table etiquette. Brochures from the U. S. Department of Agriculture are passed around and the housewife learns that it is a wicked waste of her vitality to put up with discomforts in the kitchen. Sinks and tables that are not of the right height use up too many calories, the old method of washing and drying dishes is not scientific and not having enough steaming hot water in the kitchen is on a par with not having enough heat in the stove.

Does the tired housewife who says to her guest "We ain't much on style here" realize that it is her own fault that she is overworked and without style. A little forethought would eliminate her tiredness and the same remedy would give her the style she was evidently yearning for.

Planning the menus a week ahead, using a fireless cooker, cooking at

one time enough food for at least two meals, serving one-plate dinners oftener, using a wheel tray, setting the table with regard to comfort, and eating the fruit-and-cereal breakfast on the clean oil-clothed table in the sunny nook of the kitchen are all step-saving and time-saving suggestions that Miss Crawford ardently advocates for the busy mother.

BETTER HOMES' DAY

at Hathorne

THURSDAY, JUNE 4TH

10 A. M.—4 P. M.

Conducted by Essex County Women under the direction of the Extension Department

All Homemakers Invited

All that has been discussed in theory is practiced during the next three hours. Menus and recipes are given out and the housekeepers with their assistants proceed to prepare the dinner. A typical menu might be

Casserole of Beef with Vegetables

Prune and Cheese Salad

Bran Muffins

Tapioca Indian Pudding

Each housewife has her work assigned to her. In less than two and a half hours the food is ready to be served. The tables are correctly laid, the food is placed on them, and each willing worker takes her place prepared to enjoy the fulfillment of her labors.

These ideas for better home management are brought direct to the community through the courtesy of the Essex County Extension Service and the Saugus High School lends its capacious and well-equipped domestic science room for the furtherance of these newer and more efficient standards of correct living.

MARION ELLIOTT SNUSHALL

The Advisory Council and Town Chairmen of the Extension Department Hold Their Annual Meeting

The annual meeting of the Advisory Council and Town Chairmen of the Women's Section of the Extension Department was held at the Agricultural School Friday, April 3rd. There were 35 women present.

The work with the county women during the past year was reviewed, methods for improving the work were suggested and committees were chosen for "Better Homes Day."

Miss Carolyn Nourse of the State Department of Education was present and gave a very interesting description of policies underlying the work conducted in the State under the Smith-Hughes bill.

BETTER HOMES DAY

Women of Extension Department Arrange Excellent Program

Last year our Better Homes Day was such a success we are trying to make the day this year even better.

The following committees have been appointed: Hospitality, program, exhibit, refreshment, publicity, play and rest room. The members of these committees are all working to make the day one the homemakers of Essex County will not want to miss.

There will be an exhibit of clothing showing the work done in dressmaking and millinery by the county women during the past year under the Extension Department. The exhibit committee are making plans for fine "home craft" exhibits. These will not only suggest a variety of hand craft which may be carried on profitably in the home but the women themselves will be working on the articles and will be ready to give valuable information.

Among these exhibits will be a variety of reed work, including cane seating of chairs, trays, baskets, etc. Rugs will be demonstrated, woven, braided and hooked.

Miss Mary Walker of Amory-Browne Co., Boston, will give her talk on the well-dressed woman. This will be illustrated by models wearing most attractive and practical dresses of Gilbrae cottons.

The Homemakers' Club of Saugus will give a playlet "How to Be Happy Though Married."

We have been fortunate in obtaining for our afternoon speaker, Mrs. Annette C. Dimock of East Corinth, Vt.

Mrs. Dimock is a member of the Vermont Legislature, a college graduate and the wife of a successful farmer. In her talk on "The Importance of a New Viewpoint Toward Home-making," she has a message which will be an inspiration to every homemaker.

Invite your friends and bring a basket lunch.

The following women gave reports which were very helpful to representatives from towns conducting classes for first time.

Millinery, Mrs. Francis Courtis, Marblehead; Dressmaking, Mrs. Esther Friedman, Swampscott; Nutrition, Mrs. Nora Hayes, Peabody; Home Management, Mrs. Ross Coon, (read by Mrs. Osgood), Saugus.

A luncheon served by the Homemaking Department, together with an educational film "Working for Dear Life," completed a day which we are sure all our Extension friends enjoyed.

BOYS' AND GIRLS' CLUB WORK

BEVERLY BOYS CAN COOK "Ever Ready Boys" They Call Their Supper Club

Six boy bakers! That's what they have at Beverly. Six High School students who formed a supper club under the leadership of Miss Marion Parker at the Beverly Health Center. Of course it's another 4-H Club carried on under the Junior Extension Service of Essex Aggie co-operating with the Massachusetts Agricultural College. These 4-H Clubs must be attractive to induce High School boys to cook. But cook they do! Their exhibit proved that.

On April 8th, Mr. George L. Farley, State Club Leader, sat down with Principal Pierce of Beverly High to a fine supper which the "Ever Ready Boys" planned, prepared and served. There was corned beef and cabbage, scalloped potatoes, rolls and, last but not least, cottage pudding with lemon sauce. All this was done entirely by the boys. Here's the way they did it:

An organization such as a Supper Club has meetings of course. At a meeting sometime before the exhibit, this supper was planned. Two of the boys were detailed to make the rolls at home. Two others prepared the scalloped potatoes, also at home, and the other two made the cake for the pudding. This food was then assembled at the Health Center where the boys prepared the remainder of the meal.

The Club consists of President Gordon Richardson, Secretary Alfred Rogers and Charles Smith, who are all third year members and will receive gold 4-H pins this spring as a third year reward. Thorndyke Kent and Paul Kirby will be given silver pins for second year work and Roger Larabee is the only first year club member.

One of the "4-H's" is the Heart "H." This supper club is certainly assisting along that line when one considers the help these Ever Ready Boys render their mothers by their occasional help in preparing meals at home. Let's have more of them.

4-H CLOVER LEAVES

Hugh Parkhurst of Gloucester, an Essex Aggie Alumnus and winner of 4-H Poultry honors several years ago, still has the real club spirit. He is local leader for the West Gloucester Garden Club.

Victoria Garrett of East Gloucester is another really interested member. She is President of the G. P. C. Club of East Gloucester and intends to lead the canning club this summer.

Constance Ireland and Irene Douglas, members of the Gloucester High Supper Club, are also proving their interest in 4-H club work by leading a club of younger girls who are learning cookery.



MAURICE LABEL
Garden Club Winner

Down in Amesbury the spirit is spreading for Helen Austin, an ex-club member, now in Amesbury High, is the canning club leader.

Stanley Bean of the same town is in charge of the Junior High 4-H Garden and Poultry Clubs.

The Millwood district in Rowley is to have local leadership as Paul Bubbier, an Aggie student and a club member of several seasons, is to take up the Garden Club leadership.

Paul Hsley has signified his willingness to give garden club assistance in Georgetown.

In North Andover, Clara Curley and Elizabeth Sullivan, both County champions last year, have been leading clubs the past winter.

A recent telephone call from Emma Sullivan of Cliftondale, a club member and leader of several years' experience, revealed that she is now Mrs. Cochran and that she wants to start a canning club.

They like the work so well that they welcome the chance to give it to others. That's the 4-H spirit! The spirit of service! "And what is service?" Someone says: "Service is the rent we pay for the space we occupy in this world."

DANVERS BOY GARDEN WINNER Maurice Lebel Takes County Honors

A man-sized job, a 15-year-old boy plus ambition equals success. That's the nutshell edition of this boys' work. Let's expand it a little. Take the job for instance. Maurice's father, Paul Lebel, is a mason by trade and a good mason has few idle moments. The home place consists of several acres of which about four and a half are tillable. Last year about two acres were in grass and as Mr. Lebel wanted to give Maurice a chance to prove his ability, he turned over the balance of the place for his 4-H garden project.

Maurice borrowed a neighbor's horse, hitched him up with his father's and with this team plowed and harrowed the two and a half acres which was to be his garden. Earlier in the year he had started tomato plants in a hot bed and these were set when the weather permitted. The other crops included potatoes, beans, corn and turnips. Maurice spent his spare time working his garden. Frequent visits by the County Club Agent revealed that Maurice kept his work up to standard. Cultivation was never let lag and the crops did well despite the poor combination of high land and a long drouth. The carrots alone failed, but a timely planting of late beans utilized the land where there had been too little moisture to start the carrot seed earlier in the season.

The crops were mainly disposed of at a roadside stand. Maurice's home is located on a much travelled way, the Andover Turnpike, and is a fine location for a sales booth. Of course the necessary vegetables for home use were used and the cellar stocked up for winter.

This coming July when the County Club Champions take their trip to M. A. C., the first Danvers boy to win a championship will go with them and that boy is Maurice Lebel.

FOUR-H CLUB WORK

Four-H Club work, being the most recent born of all boy and girl organizations, has taken advantage of its youth and insisted that its leaders help boys and girls sell their products and see to it that their projects are brought to a successful finish, thus developing a system of education that will keep a boy's dinner plate before him.

Four-H Club is the only boys' and girls' organization that holds the requirement of doing a piece of the world's work for membership. The boy with the advice of his parents and leaders selects his job and then the leaders help him bring it to a successful conclusion.

WATER SUPPLY

Both the Purity and Convenience of the Water Should be Carefully Considered

Those farmers and camp owners who are beyond the reach of city and town systems should make provisions for an ample supply of water early, so that the danger of shortage in the dry season will be avoided. Care should be taken to avoid all possibility of the water becoming polluted. As has been previously pointed out, wells and springs should be protected from surface water which will carry into them dirt, bad tastes and bacteria. If near points where human waste has been deposited, disease bacteria are likely to be carried by surface water. Dug wells should have tight walls from a point about six feet below the ground surface to a few inches above and then be covered with a water tight cover of concrete with a man-hole and, if the pump is to be over the well, a hole for the suction pipe and bolts to fasten the pump. Springs should be protected in a similar manner. Drilled and driven wells should have water tight concrete platforms about six feet across, so sloped as to prevent splash from the pump from getting into the well.

In addition to pollution of wells by surface water, another possible source of danger is from contaminated water finding its way through the ground from barnyards or from cesspools and other places where human excreta may have been deposited. In such cases there is great danger of disease. The slope of the ground surface is not a sure indication of the direction the underground water will flow. Cases have been found where a cesspool has contaminated a well which was on a slope above it, the bottom of the well being lower than the cesspool and receiving seepage from it. On a certain farm in this county where a well was being cleaned out, a stream of water was found to be flowing into the bottom. Investigation showed that this led directly from the cesspool. The well was then changed to a cesspool and another source of water supply secured. Such dangers are likely, chiefly in certain open soils where water may run in channels or where underlying rocks have open seams or channels. Experts familiar with the ground formation can point out where such danger is likely to exist.

Next in importance to purity is the convenience of the water supply. In those locations where private water systems are necessary to secure running water, the cost of water may sometimes be higher than in towns and cities, but in many cases, it is less. However, as Professor Behrends of Cornell University, says: "A water system is no longer considered a luxury, but rather a necessity and an

interest paying investment." Important as is the matter of transportation on the farm, the writer believes that running water in the farm buildings should be provided before money is invested in an automobile. When we consider the fact that running water may be secured in many cases for as little as \$15, it is a wonder that there is any home or camp without it. Yet in many cases water used in the home is carried in by the housewife, though she rides in an automobile.

A poor or inconvenient water supply is due in many cases to the people not knowing how to improve it or to thinking of an expensive system when one might be secured for only a few dollars. The ways and systems are too numerous to be described in this short article.

If any reader is interested in securing a better water supply, he may use the coupon below.

Consultation Coupon.

Essex County Agricultural School,
Hathorne, Mass.

Gentlemen: I am interested in securing a better water supply and would like to have your agricultural engineer call and go over the matter without cost to me.

Signed

Address

POULTRY DIVISION

As this article is being written, the students employed on the poultry plant are spending what proved to be a rather disagreeable day outside, to good advantage in cleaning up the incubator cellar. Our season of incubation was completed on Wednesday, April 29th, and all of the incubators have been thoroughly disinfected and cleaned and left in perfect condition for use next year. A few figures on the result of this year's work with the incubators may be of interest. Our equipment in the cellar consists of one 3000-egg Newtown Mammoth machine, one Prairie State 220-egg machine and two Cyphers machines of the same capacity. The small machines were filled with eggs on January 21st and from that time up to now students and the poultry instructors have been devoting more or less time to this important and interesting branch of poultry husbandry. The total number of eggs set was 10,435. The total number of chickens hatched was 5,933. This gives an average for the season of a 56.7% hatch.

When one realizes that these machines were operated by students, some twenty-five different boys having an opportunity during the hatching season to get practical experience in this branch of work, the results obtained are very gratifying at least to the instructors.

A few of the chickens were sold, but we have on the poultry plant at

A BRIEF GARDENING BROADCAST FROM STATION ECAS

Don't be tempted to set out tomato plants before the week of May 25th unless you have conveniences for protecting them against frost.

Growers of tomatoes in this county who risk setting the plants outdoors before the last week of May, generally hold a reserve supply of plants in the hot bed to be used in case frost catches the first lot.

Home gardeners should know that the short stocky "dwarf" varieties of tomatoes so often sold by city stores are very scant producers of fruit. Buy the so-called "running" varieties like "Bonny Best," (early) and "Stone," (late), that require a spacing of four or five feet each way and yield abundantly when well fertilized.

Heavy applications of hen manure make tomatoes produce too much foliage, and too little fruit.

The fall crop of beets and carrots to supply roots for winter storage and use, may be planted the first part of July.

Try and arrange to have a water supply that may be liberally applied to the garden as the mid-summer dry spell approaches. It does not pay to apply less than the equivalent of one inch of rainfall in a dry time. When this has soaked in, mulch (loosen) the surface of the soil with some cultivating tool. This forms a blanket of loose soil which prevents the sun and wind from drawing out the moisture. Many times lack of water is the one factor which lowers the production of a garden to a discouraging degree. Don't let this happen to you.

In many home gardens there is a need for more careful planning which will result in a wider range of kinds and varieties of vegetables being planted, and planted at intervals to insure a supply evenly distributed through the season.

A common cause of unsatisfactory production in gardens is that the gardener unwisely skimps his investment in manure and commercial fertilizer plant food.

Upon request the Vegetable Gardening Division of the Essex County Agricultural School will furnish a selected list of excellent gardening bulletins which may be obtained by writing to the State House.

the present time approximately 5,000 chickens varying in age from twelve weeks to two days. Our first broilers were marketed at the age of ten weeks and weighed an average of two and one-quarter pounds. Of these 5,000 chickens on the poultry plant at the present time, about 65% are Rhode Island Reds, 25% Barred Plymouth Rocks and 10% White Leghorns.

HOMEMAKING NOTES

Annual Parents' Day, June 10. Honor Roll for the Quarter

The Annual Parents' Day observance will be held on June 10th, and all who are interested in the school are cordially invited. The whole day is given over to the entertainment of parents and friends. Punch will be served at noon and ice cream will be for sale. Bring your lunch and enjoy a day in the country with the Aggie girls.

There will be an exhibit of work done by the students in Cooking, Sewing, Textiles and Homecraft. In the afternoon, a pageant, "The Color Wheel Revue," will be given, in which all of the girls have a part.

Mrs. Irving O. Palmer of Newtonville, will give her lecture, "Where the Four Leaf Clovers Grow." All those who have heard Mrs. Palmer will be eager to hear her again, and those who have not had that opportunity, have a treat in store.

HONOR ROLL

For Term Ending April 3, 1925

Virginia Davis, West Newbury.....	91.5
Jean Blake, Gloucester.....	91.1
Sarah Burnham, Essex.....	91.1
Ruth Gould, Merrimac.....	91.0
Arlene Pilkington, Methuen.....	90.9
Helen Boyd, Danvers.....	90.8
Elizabeth Hutchinson, Nahant.....	90.4
Ruth Erickson, Danvers.....	90.2
Marjorie Hawkes, Danvers.....	90.2
Helen Luscomb, Lawrence.....	89.6
Mary Scarlett, Lynn.....	89.6
Christine Gilman, Lawrence.....	89.5
Dorothy Mattheson, Lawrence.....	89.5
Florence Mason, Marblehead.....	89.3
Gertrude Smith, Methuen.....	89.1
Ethel Howard, Swampscott.....	89.0
Evelyn Scobey, Danvers.....	89.0
Rae Reid, Georgetown.....	89.0
Emma Rix, Danvers.....	88.7
Ethel Thompson, Newburyport.....	88.5
Doris Garland, Newburyport.....	88.2
Thelma Sewell, Lynn.....	88.2
Hilda Noyes, West Newbury.....	87.7
Stella Burbine, Beverly.....	87.3
Doris Osgood, Middleton.....	87.0

THE GRADUATION GOWN

"What a fine honor it would be if the best dressed girl on the commencement platform were given honorable mention because she had constructed her own garments the most beautifully and at the least expense to her parents," thinks the Agricultural College, Lincoln Nebraska. At the Essex County Agricultural School, this would be well nigh impossible, as every graduate makes her own entire outfit, and the present seniors are to have their dresses of the same material, cut and trimmed to suit the taste of the individual wearer. They will be made of oyster white linen, decorated with hand-work and medallions. These gowns will be useful after they have

served their first purpose, and besides being attractive will be very inexpensive.

A group of about twenty-five students with Instructors Miss Browne and Mrs. Clapp, and two mothers, Mrs. Hawkes and Mrs. Erickson, spent May eighth in Boston. They visited the stores in the forenoon, and in the afternoon went to the Home Beautiful Exposition. The day was very profitably and pleasantly spent, and the girls returned with many new ideas for their school work.

As a part of the class work in the Homemaking Department, the students are dyeing cheese cloth in various colors and making it into gowns to wear in the pageant, "The Color Wheel Revue," which they are to give on Parents' Day. This practical work in dyeing and the responsibility each girl has in making her costume, adds to her general knowledge and to her artistic sense.

FINAL RESULTS OF THE STUDENT EGG-LAYING CONTEST

March 27th was a red letter day for the sixteen participants in the Egg-Laying Contest which had been running for five months. The race proved to be very close. The two leading birds had a safe margin of 64 eggs over the second two birds, but it was a different story for the next five participants. The totals for the six leading participants are as follows: First, 239 eggs or 81% egg production for the two birds for five months; second, 175 eggs or 58%; third, 174 eggs; fourth, 166 eggs; fifth, 163 eggs; sixth, 161 eggs.

From these figures you can see that the final outcome was most interesting and the high birds could not be determined until the last week of the contest. There were two pens of birds in this contest. Each pen had sixteen birds; pen one containing Rhode Island Reds and pen two, Barred Rocks. The birds were picked out by the students from the School flock and cared for during the entire five months by the various members of Mr. Moore's advanced poultry class, who were the participants in this contest.

The score by months is as follows:

	R. I. Reds	B. Rocks
1st month	236	174
2nd month	229	169
3rd month	253	206
4th month	255	294
5th month	260	294

The total number of eggs laid for the five months was 2370 or approximately 50%. It was a very good average, considering that in all egg tables these five months are the lowest five in the year. The leading hen, a Rhode Island Red, laid 129 eggs, or a production of 86%. The second

SALAD SUGGESTIONS

(Continued from page 1)

Orange and Date Salad: Sliced oranges, dates cut in quarters, shredded coconut.

Stuffed Tomato Salad: Tomatoes, cucumbers or celery, chopped raw cabbage, mayonnaise dressing.

What to serve with Salads: 1. Crisp crackers; 2. Cheese straws; 3. Small sandwiches; 4. Nut bread.

Tomato Jelly Salad

1 can tomato, 1 ts. salt, 1 ts. powdered sugar, 2 1/4 tsp. gelatine, 1/2 c. cold water.

Heat and strain tomato, add salt and sugar; soak gelatine in cold water fifteen minutes and add to hot tomato. Pour into small cups and chill. Place on lettuce leaves and garnish top with mayonnaise dressing.

Russian Salad

1 c. cooked carrot cubes, 1 c. cooked potato cubes, 1 c. cooked peas, 1 c. cooked beans, 2 hard boiled eggs, 2 pimientos.

Marinate the vegetables with French dressing. Arrange on lettuce leaves in separate sections. Garnish two sections with chopped pimiento, one section with the whites of eggs finely chopped, and the other section with the yolks forced through a strainer. Use mayonnaise dressing to cover the vegetables in each section.

highest hen, a Rhode Island Red, laid 117 eggs and the third highest hen, a Barred Rock, laid 110 eggs. The pen of Reds laid 51% and the Barred Rocks 48%, showing very little difference in the two breeds for the entire five months.

During the course of the contest, some very interesting observations were made by the participants which will be of value to them in poultry work in years to come. One bird, a Rhode Island Red, after two months of never having laid an egg, was post-mortemed and it was found that this particular bird had no oviduct and would never have laid an egg had she lived for several years. From all appearances as far as one could determine from handling the bird, she was a perfectly normal specimen. This is a good example of the value of trapnesting.

Another very interesting case proved to be a Barred Plymouth Rock bird which, during the entire five months, followed this schedule very faithfully. She laid five days in succession and laid off three days with only one or two interruptions during the 150 days.

This idea of running a student egg laying contest met with such favor and proved to be so successful this year that it is planned to continue the practice with the advanced poultry class the coming season.

SUCCESSFUL DAIRYING

High Production, the Basis of Success

Mr. Thomas Elder of Mt. Hermon School, has said "if one-third of the cows of New England were slaughtered and the other two-thirds were selected and properly managed and cared for, New England would have just as much milk and of better quality than she has today.

Mr. Elder has probably raised more high-producing cows than any man in America.

I firmly believe that Mr. Elder has "hit the nail on the head." We have too many cows that are producing milk at a loss; cows that do not bring in any return; cows that could be replaced by a real good milking machine making greater return to her owner.

There are a few cases where dairy-men have high producing cows that do not make a profit. The reason for this is easily explained. It is found in all kinds of business. A business may be well organized with the best of equipment and machinery to work with, but the business will not be successful unless the overhead is reasonable and the business is managed well.

So with the dairyman. He must have reasonable overhead and good management if he expects to make a profit with high producing first class cows.

The high producing cow when combined with reasonable overhead and good management will always make a reasonable profit.

Our conclusion is, then, that the production of the cow in most cases is the limiting factor of profitable dairying.

If we are going to be successful dairy-men, we must then purchase or raise high producing cows. How are we going to select and raise cows that will be high producers? High producing cows may be raised by using a bull from high producing dams or high producing cows. But where will be obtained the high producing cows to breed? High producing cows may be selected by using your best judgment on the following questions:

1. What was her production in her last lactation period?
2. Is she the "milky type" of cow?
3. Is she large enough to produce a large quantity of milk?
4. —What is the quality of her milk?
5. Has she a good large flexible udder?
6. Is she a good feeder? Is her appetite small or limited for production?
7. Is she in good condition?
8. Is she free from all ailments of all kinds?

Compare the pictures on this page, a good producer vs. a poor producer. No. 1. A good producer, produced



Upper—High Producer

Lower—Low Producer

5,201.7 quarts at a net profit of \$280.18 last year. No. 14, the low producer, gave 3,025.9 quarts at a net profit of \$77.35.

Then the next cow you buy or raise, make it a High Producer. She will pay returns in money and satisfaction that goes with success.

SEASONABLE NOTES

Country wide the spring season is about two weeks earlier than the average of the 10-year period. This has resulted in the following facts:

In case of asparagus, over twice as much has been received to date than last year with prices ranging 10 to 20 cents lower per bunch.

We are eating nearly three times as much Iceberg, or shipped in lettuce, and about the same amount of home grown lettuce a about a year ago with the resulting price drop of nearly 2-3 of last year's price level.

Already nearly twice as many eggs have been put into cold storage in Boston than was put in at a similar date last year. The price level, however, in spite of this large increase, is mostly 5 to 10 cents a dozen higher than last year, indicating that egg

prices for the winter months will be correspondingly higher. Eighty-five per cent of our eggs come from the Middle West, but they do not actually compete with nearby henneries.

What is better than home canned asparagus tips on toast, or lettuce in health giving salads?

Several thousand forest trees are being planted out now in the Harold Parker State forest in the Andover-Reading section. It is not too late yet to do transplanting among other forest trees. Hemlock and spruce as well as white pine are valuable evergreen trees to transplant.

BOYS ON PROJECT

Doing Agricultural Work in Essex County.

At the present time nearly one hundred students of the agricultural department of the School are doing agricultural work in Essex County. Some have located in other states.

Twenty boys have been retained on the School farm where they will work under the supervision of the instructors and thereby gain valuable experience.

ESSEX FARMER AND HOME MAKER

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Vol. 6

HATHORNE, MASS., JULY, 1925

No. 4



William Brown, Marblehead, and Andrew Baillie, Methuen, operating Tying Machine at the School Garden

POULTRYMEN SHOULD FEED MINERALS TO GROWING FLOCKS.

Uses of Lime, Salt and Bone Meal

At the recent poultry convention at the University of New Hampshire, Dr. Kent, Poultry Feed Specialist, stressed the feeding of minerals to poultry and explained some of the hitherto unknown advantages of lime, salt and bone meal in the poultry ration.

He pointed out that none of the grains commonly fed in the scratch mixture contain much mineral and that it must be added in the mash. It is necessary to start feeding minerals with the chicks and continue feeding all during their period of growth through maturity. While it is true that mature hens sometimes do not show lack of minerals until after laying; feeding them at that stage will not correct the fault. Such hens have taken minerals out of their bones and laid them into the eggs. An abundant supply of minerals fed to the chickens during their growing stage is the only preventative. The time to put minerals in the bones is when chicks are growing.

An added reason was also given—Poultry men universally feed only animal proteins—no mineral proteins

having yet been successfully used, and the above mentioned minerals balance up the high protein ration.

Dr. Kent recommended this mineral mixture:—5% bone meal, 1% salt and 5% limestone grit. If you are supplying grit and oyster shell outside, then reduce the limestone to 2%. All three should be thoroughly mixed in the mash, having made sure that your limestone contains a good quality of calcium carbonate.

The importance of an abundant supply of minerals can best be summarized by noting the following irregularities due directly to a lack of these minerals:—

1. Mature hens laying porous, brittle, thin-shelled eggs.
2. Crooked keels in hens. (Hen takes minerals out of bone to lay eggs although more often hen could decrease in eggs instead.)
3. Bleeding combs, especially pullets that get scratched (minor).
4. Toe-picking in chickens. (Lack of calcium and limestone—grid fed early will prevent it.) Not a lack of protein.
5. Egg eating.
6. Blood clot in eggs in late winter—Feb. and March. (Feed cod-liver oil during this period to make minerals more available.)
7. Bacillary White Diarrhoea:

USE OF HERBACEOUS PERENNIALS

Tendency in Modern Gardens

To one who has noted the trend in gardening for a period of years, the changes are very interesting. For example thirty years ago stress was given to annual formal bedding. Many of our public enterprises expended a vast amount of time and money in laying out geometrically designed beds of annual or tender greenhouse plants. This has given way in most cases to other types of ground ornamentation.

The rise of planting of wooded plants in which the use of both native and introduced shrubbery has played an important part is a development of the last decade. Too much cannot be said in praise of the use of the better native plant material. The discoveries and introduction of plant material by the horticultural explorers as typified by Wilson and Meyer and others is a matter of hard labor. This has produced a great boon for the lovers of beautiful grounds, both public and private.

If one was asked to study the great movement of the last decade in the gardening field it would be to call attention to the use of herbaceous perennials. It is true that the gardeners who preceded us had a worthwhile list of this sort of plants—peonies, hollyhocks, foxglove, together with an extensive group of less known varieties, made a very full set. Today, however, the advance of known kinds and varieties, with particular emphasis on certain outstanding worthwhile plants like the iris, the gladioli and the peony, has been phenomenal. These favorite plants are now supported by societies of national and international extent; which are bending about them both general and special plant lovers. As a result we now have a scale of excellence, annual conventions, yearly reports, long lists of prizes and other agencies for extending and increasing the use of these plants.

For the one striving for a beautiful home, we have long come to consider that the home garden surrounding the house is a part of the home. The use of these kind of plants, that is, herbaceous perennials, offer wonderful possibilities. It is now possible to have a succession from the time of the early flowering bulbous plants in April throughout the season until the end of the hardy chrysanthemum sea-

Continued on Page Two

Essex Farmer and Home Maker HATHORNE, MASS.

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CALENDAR

- July 28-31—Farmers' Week—Massachusetts Agricultural College, Amherst.
- August 5—Annual Field Day for Massachusetts Market Gardeners—Field Station—Waltham. 10 A.M. to 4.00 P. M.
Annual meeting of State Ass'n. at 4 P. M.
- August 4-7—Conference—Vocational Agricultural Instructors of Massachusetts, at the School.
- August 8—Annual Field Day of Junior Achievement Clubs—Essex County at the School.
- August 19—Annual Field Day of Chebacco Pomona Grange at the School.
- Sept. 8—Agricultural Department opens for new students.
Homemaking Department opens for all students.
- Sept. 28—Agricultural Department opens for advance students.

THE CONVENTION

Again this year the vocational agricultural teachers of Massachusetts meet with this School. This is the fourth conference arranged at this point under the direction of the Vocational Division of the Massachusetts State Department of Education. It is to be hoped that in many ways it will be the biggest and best ever held. It must be a matter of great gratification to those who have worked so long and earnestly in the work to find this conference growing both in attendance as well as in value of program.

Of the many studied values which

come from such a conference; one which can scarcely be overlooked is the acquaintance made with the men, who are doing the same sort of work in different parts of the state. There is a certain fellowship which grows out of such meetings which is very lasting in its effect and value. All crafts, trades and professions have found the convention an ideal way for checking up matters of common interest and redoubling and increasing the enthusiasm for the common job. Another factor is the inspiration and help, which comes from men who have advanced far enough that they may reflect the results of their studies and thus save the individual time and effort in arriving at conclusions and results.

Another valuable part of this conference is an opportunity to study the work of the institution where the conference is held, whether it be at the Massachusetts Agricultural College or at the various county schools and departments throughout the state. Each has a slightly differing or varying of conditions and yet the outstanding and overhead truisms are well demonstrated in each individual case.

Great value is now considered to be found in the visiting of projects whether of graduate students or under-graduates because the trained observer can easily distinguish the value of the methods used as exemplified by the work of the student farmer. To one who has followed these project studies for a series of years, the greater results which are now being secured from this method of teaching is very apparent. In this connection it is interesting to know that Massachusetts, which was a pioneer in vocational agricultural teaching, is apparently holding her own quite well in spite of the tremendous impetus which has been given to this work throughout the United States as a result of an inactment of the Smith-Hughes law.

AN APPLE SURVEY OF NEW ENGLAND

Sometime soon several carefully instructed college students under the direction of the State Experiment Station will visit the leading apple sections of the county and make a survey of the orchards.

For years the apple crop in Massachusetts has been reported as 60 per cent of normal or 80 per cent of normal and that gave us some idea as to the size of the crop but we have never known how many bushels were produced when they had a normal crop.

Such a survey should be of great interest to the grower who needs to know not only the crop outlook but also what variety may be planted without danger of flooding the market, especially in regard to the Baldwin and MacIntosh.

CHEBACCO POMONA FIELD DAY.

WEDNESDAY, AUGUST 19TH, GRANGERS MEET AT HATHORNE

The annual Grange Field Day will be held at the Agricultural School, Hathorne, Wednesday, August 19th. The program is being prepared and the meeting should prove enjoyable. The speakers for the day will be announced later in the press.

If you belong to any grange, attend the Field Day this year at Hathorne, on Wednesday, August 19th.

USE OF HERBACEOUS PERENNIALS

Continued from Page One
son in late November. In no class of gardening can be offered a wider variety both as to form, color and interest, than in this class of plants. One has the constant changing problem of caring and treating. The varieties become too massive as well as becoming too crowded, the insects and diseases may play havoc and as a result one must be constantly studying, rearranging, transplanting and changing. Phlox masses may well be divided and replanted every three years, iris is well replanted every four years and peonies every five years. This is manifestly the work for the fall of the year. Sectional divisions become fairly well rooted and one may expect some blossoming effects the following season.

Splendid developments are taking place in several of the groups, for example, the development of new varieties in Columbine (*Aquilegia*). The Larkspur (*Delphinium*) has been developed now in a variety of shades and the white form of this stately plant is very attractive. New varieties of Phlox are appearing, only three objectives being in mind—1st—the lengthening of the blooming season by introduction of new varieties and increasing the attractiveness by selection of dwarf forms having good flowering spikes: 2nd—by the addition and multiplication of colors and shades: 3rd—by the increase in the size of the individual flowers. Varieties with blossom as large as a silver dollar now exist.

One may go and extend this list of varieties indefinitely. The garden enthusiast, however, will easily keep himself informed. With access to horticultural journals and magazines now as fine as any special class magazines in existence, together with the new books which are appearing constantly, specially written from the standpoints of the garden lover, together with the different bulletin and circular material which is constantly appearing from our Experiment Station and testing grounds, one need not be in the need of information if he will only use these sources. Indeed, with all of these, one need not be without the best of help and information in pursuing this subject.

THE SCHOOL HERD

Federal Accredited. Production Being Gradually Increased Through Breeding

Any study of the herd would be incomplete without taking into consideration the work done by the instructors and farm managers in the past, as well as that of the Trustees, and the Director. It is through their work and kindly interest that it has been possible to continuously improve the herd. This improvement has been in line with production.

The herd is a Federal Accredited Herd, the certificate having been received in May of this year. This means that the animals are tuberculosis free.

Our policy in breeding herd management is to work up from grades into pure bred Advanced Registered stock, by eliminating a poor producer and adding only pure bred animals of higher production. If a grade continues to produce a large amount of milk profitably, she is retained.

We raise very few calves, only those from high producing dams. We have taken this stand because of the cost in raising calves in Essex County. However, where the dam and sire are from high producing stock, we feel that it is cheaper to raise the heifer calves.

The average production of our milking cows was 6500 pounds of milk per cow for 10 months, or approximately 3250 quarts of milk per cow.

The pure bred in the herd contain strains of Guernsey blood that has proven itself in the lines of production.

The herd bull's (Argilla Chieftain No. 101012)—dam, last year produced 11941.8 pds. of milk. Another animal, Golden Wander's Betty No. 139, 927; her grand dam on Sires side (Langwater Gardenier) produced 13,819 pds. of milk in a year; Great Grand dam (Royal Rose of Easton) produced 15,483 pds. of milk in a year. For the most part, our pure bred are but three or four generations removed from Imported King of the May, and Yoemans King of the May; bulls that made possible the fame of the late Clifford Ames of Easton, Mass., with his truly, great herd of producing Guernseys.

The records of our herd for 1924 are as follows:

No. 25, Golden Wanders Betty, 2051½ pds. milk, first freshened, Sept. 1924; No. 26, Princess Golden Rose, 2004 pds. milk, first freshened Oct. 1924; No. 29, Hope of Donibristle, 2721½ pds. milk, first freshened Sept. 1924; No. 31, Brook Farm Aster, 1426½ pds. milk, first freshened Nov. 1924; No. 1, Grade Holstein, 9776½ pds. milk; No. 4, Grade Guernsey, 6699½ pds milk; No. 5, Grade Hol-

stein, 9961¼ pds. milk; No. 6, Grade Guernsey, 7442 pds. milk; No. 17, Grade Ayrshire, 11447 3-4 pds. milk; No. 19, Grade Guernsey, 10139¼ pds. milk; No. 28, Grade Holstein, 7969 3-4 pds milk (we owned her but 10 months of the year.)

We dispose of our milk in two ways; to the Homemaking Department, and to the Essex County Sanitorium. A check up over a number of years shows that the herd has more than paid for itself.

Of the future all we can say is that we will not go beyond 25 head of cattle, but we will continue to improve from the standpoint of greater production. We believe that if the average farmer will get a plan or herd improvement, and with patience stick to his plan over a number of years, he could, with no great outlay of money, build up a valuable pure bred herd. I say this because no animal that has ever been in our herd cost over \$200. and the average higher priced animals in the herd cost between \$150 and \$175.00. This takes in the days during, and after the great war, with its high prices.

FIELD DAY AT HATHORNE

4-H Clubs Will Meet Saturday, Aug. 3

The Annual Junior Club Field Day will be held on the Agricultural School grounds on Saturday, August 8th. County Club Leader DeQuoy, has arranged an all day program from 10 A. M. to 4 P. M., consisting of agricultural and homemaking contests, moving pictures and field games. Every member of the 4-H Clubs in Essex County are cordially invited to spend Saturday, August 8th at Hathorne as a guest of the School, and the invitation is also extended to anyone who would like to visit the school at this time.

EXTERMINATING THE WOOD-CHUCK

Woodchucks are now so numerous in the outlying districts that much damage is done to growing crops. They can be exterminated by the use of Carbon Disulphide which can be purchased at any drug store. It is very inflammable and should be handled with great care. Pour one-half a cupful of Carbon Disulphide on a rag and push into the hole, closing all exits. The fumes are deadly and if thoroughly done, this method will destroy the animals.

Another method is by the use of Cyanogas, manufactured by the American Cyanamid Company. 511 Fifth Ave., New York. This method of application is simple; just put a heaping tablespoonful down each hole.

Kill the woodchucks before they destroy your crop.

SEVEN ESSEX COUNTY BOYS AND GIRLS WIN HONORS

Seven Essex County boys and girls enjoyed a week of rest and recreation at Camp Gilbert, located at the Massachusetts Agricultural College in Amherst. The young folks have done excellent work during the past year in their projects and as a result were declared champions of their respective clubs and awarded a vacation of one week at the College.

County Club leader Stanley DeQuoy conducted the party by automobile over the famous Mohawk Trail to Millers Falls and thence to Amherst. The boys were quartered in the spacious Drill Hall, while the girls occupied rooms in the women's dormitories. Meals were served in Draper Hall. The week was well spent and the boys and girls received new inspiration by coming into direct contact with club leaders and champions from all parts of the State.

CLUB CHAMPIONS

Annabelle McLelland	
Food	Beverly
Mary Kackadorian	
Clothing	Methuen
Julia Takesian	
Canning	Haverhill
Frank Chadwick	
Poultry	Haverhill
Domini DiDonato	
Handicraft	Beverly
Horace Shute	
Poultry	West Newbury
Maurice Lebel	
Garden	Danvers

NEWS NOTES

William F. Howe, Assistant State Leader recently visited several of the more prominent garden and small fruit club members of Essex County to inspect their work.

Benjamin Ogden, the 1922 Garden Champion, is putting on a fine piece of small fruit club work at his home in Middleton. He has a new bed of 1400 strawberry plants coming along finely and harvested \$200 worth of berries from his old bed.

Maurice Lebel will be our candidate for State Garden Championship this year. He is going to Amherst as County Champion this week as a result of his work last summer, and we hope he will go next summer as State Champion.

Benjamin Yeyagelian of Methuen is trying hard for County Championship this year if the appearance of his big market garden is any indication.

DUSTING

Brief Gardening Broadcast from Station E. C. A. S.

July is the month when the destructive early blight may appear on potato foliage, and August and September usually bring the dreaded late potato blight.

Most gardeners are familiar with the liquid Bordeaux spray, formerly used in preventing potato blights. A large number of gardeners considered the necessary equipment and labor required to do a good liquid Bordeaux spraying job, excessive. They did not possess the time or patience to undertake it.

The search for an easily applied and effective blight preventive resulted in the discovery of dusts which are efficient and can be applied rapidly.

Progressive large scale growers of fruit, potatoes and other vegetable crops have eagerly welcomed the new dust fungicides and insecticides because of their combined effectiveness and the great saving in labor which their use allows compared with previously popular liquid sprays. There is one large farm in Essex County where a five acre block of potatoes is being kept free from bugs and blight with the new dust mixtures. The superintendent of this farm is familiar with the old liquid spray remedies and he states that while the quantity of dust needed costs more per acre, the saving in the labor of application is tremendous compared with the old method, and far more than makes up for the increased cost per acre of material.

The only concern manufacturing dust, and equipment for its application, which has to date brought its wares to the attention of the writer is the Niagara Sprayer Company of Middleport, N. Y. This concern publishes a bulletin, No. 255, entitled "When and How To Dust." Every gardener should obtain this bulletin and become acquainted with its contents. It treats on the dusting of both fruits and vegetables.

The writer has recommended the following dust mixtures to students who are growing potatoes.



The "Half-Way Stand"—A Senior Project

- (1.) "Niagara D-18 Dust" contains 20 per cent dehydrated Copper Sulphate, 25 per cent Calcium Arsenate and filler. It takes care of blight and bugs and of many other fungus diseases and chewing insects which attack potatoes and other vegetables.
- (2.) "Niagara D-20 Mixture" is identical with the preceding D-18 Dust except that the Calcium Arsenate is reduced to 20 per cent. It is used in cases where bugs are not so serious as to necessitate D-18.
- (3.) "Niagara D-6 Dust"—This is the same mixture as the D-18 and D-20 Dusts with the omission of the poison. Use this on potatoes and vegetables when fungus diseases (blight) alone are being combatted.
- (4.) "Niagara D-25 Dust" contains no poison, but its fungicidal property has been increased to 25 per cent dehydrated Copper Sulphate. This mixture is used whenever severe blight or other fungus disease conditions exist.

For kitchen gardens there is a small duster costing one dollar and for larger gardens up to several acres there is a hand operated duster costing about twenty-two dollars which is durably made and will last several seasons.

LIVING "BY THE SIDE OF THE ROAD."

A famous modern poet has written "Let me live by the side of the road And be a friend to man."

Several of Essex Aggie's students are living by the side of the road this summer and endeavoring to perform a service to their communities through their roadside markets. One of them is Norman Morgan who is completing his last year at Aggie this summer.

This type of marketing is a new thing to Morgan, whose home is in Methuen, and he has discovered a number of problems which have to be overcome. These have not proven too large for him and he is gradually establishing quite a clientele who appreciate the opportunity and convenience of being able to purchase strictly fresh goods at reasonable retail prices.

Morgan's booth is known as the "Half Way" stand and is located on the turnpike at the School market garden, just half way between Boston and Newburyport. Fresh vegetables, fruits and poultry products constitute his line of goods and these are purchased daily from the school and neighboring farmers. Reasonable prices, maintaining a constant and complete stock of goods, having these always strictly fresh and keeping them on display in the most attractive manner, Morgan has found to be some of the elements which make for success in this latest form of project enterprise. Attractive signs also aid materially in advertising his goods.

This type of project is providing an insight into that other side of the great food problem of today, namely, getting goods from the producer to the consumer. Morgan has completed two projects, one in poultry and one in gardening, concerning the production side and is combining with this market project further training on the School farm in the production of fruit and vegetables. There is much satisfaction in being able to see one's products disposed of at the most profit.



Ready for Business

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 6

HATHORNE, MASS., DECEMBER 1925.

No. 5

CLASS OF 1925 GRADUATES

Exercises at Peabody Institute, Danvers, Nov. 21, 2.05 P. M.

1. Opening March, "America's Finest" Zamcenik
2. Invocation
Rev. George Beecher Lawrence
3. Song, "Pilgrim Fathers".....Wade
Combined Chorus
4. "Some Opportunities in Ornamental Gardening"
James Silva, Jr.
5. Song, "Starry Night". Densmore
Homemaking Dept. Glee Club
6. "Stepping Stones to Success in Dairying"
Spencer Hunnewell
7. Song, "Winter Song" Bullard
Agricultural Dept. Glee Club
8. Training in Homemaking
"Cooking"
Christine Gilman
"House Planning"
Florence Mason
Millinery"
Ethel L. Howard
"Sewing"
G. Rae Reid
"Athletics"
Gertrude A. Smith
9. Award of Prizes
Director Smith
Mr. R. S. Bauer Prizes for Excellence in Agricultural Projects.
Mrs. R. S. Bauer Prizes for Excellence in Homemaking Projects.
Alumni Association Prizes for Greatest Improvement in Academic Work.
Gov. John Endecott Awards given by Mr. Wm. C. Endicott
for Superior Projects in Horticulture.
Miss Gertrude MacCormack
(Class of '17) Awards for Excellence in Home Decoration.
10. Song, "Gleam, Gleam O Silver Stream" Raye
Homemaking Depart. Glee Club.
11. Solo
Doris J. Garland
Presentation of Diplomas
President Ralph S. Bauer, Board of Trustees

Musical Director, Miss Flora Richmond, Danvers.

Pianist, Miss Dorothy Mattheson, '26.

Violinists, S. P. Armitage, '27; H. W. Lear, '27.



New Students Enrolled in the Agricultural and Homemaking Departments.

ALL SECTIONS OF ESSEX COUNTY WELL REPRESENTED IN THE ENTERING CLASSES AT THE SCHOOL THIS YEAR

Over 60 new students have been enrolled to date in the Agricultural Department. Of these, two were mature students who have been given advanced standing in the school, and three were former students who have returned to take up their class work at the point where it was left when they dropped out. The others are grouped in three large divisions, two of which will take the four year course and the third, a group of students with two or more years of successful school work.

About half of the towns and cities of Essex County are represented in the new boys' class; Haverhill and Rowley being particularly well represented, and when the entire student body is checked, one finds representatives from every one of the towns and cities but one.

During the first week of school, the work in part consisted of a series of tests and contests designed to acquaint the staff as quickly as possible with the new boys. These consisted of agricultural identification contests, use of agricultural terms, as well as general educational or intelligence tests. The students were also given very thorough visits under instructor guidance to all parts of the farm.

An interesting feature of the second week's work consisted of two trips to Topsfield Fair; on the first day to compete in the stock judging contests and on the second, to survey the general exhibits, under instructor guid-

ance, in the Fruit, Flower, Poultry, Stock, Vegetable, Farm Machinery and Grange Building.

By the time the advanced students returned, the new group were well adjusted to their new surroundings and well into their courses for the year.

Home-making Department.

The girls in the first year have come directly from grammar school. Those who have been two or three years in a high school, but for one reason or another prefer to make a change, are allowed to enter the second year class. Girls or women who have graduated from a high school and wish to obtain a thorough knowledge of the household arts, form a class by themselves and are given one year of intensive training in Cooking, Sewing, Millinery and closely related subjects. There is no age limit to this last class, the only requirement being that a girl or woman should have been graduated from a high school, or its equivalent.

"Kelsey's Rural Guide"—Atlantic Monthly Press.

"The name is by no means as good as the book. The book is better than its claim. It is a practical hand book full of fresh and kindly inspiration which should put new heart into the rural dweller and which will give more definite directions to the vague longing that many a city prisoner has felt for the country."

Essex Farmer and Home Maker HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

A BI-MONTHLY PUBLICATION SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

Entered as second class matter, May 23, 1919, at the post office at Hathorne, Mass., under the act of August 24, 1912.

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CALENDAR

Dec. 18—Jan. 4—Christmas Recess.

SCIENCE DAY

Science Day was established as an annual affair at the school on Thursday, November 5th. The purpose of this day is to acquaint the student body with the close connection of the field of science to agriculture by setting forth some of the contributions made. Every farmer is scientific to a greater or lesser degree depending on the use he is making of the tools and principles that will bring the best results.

The program for this day included an exhibition of Scientific things collected during the past summer by the following students, as a part of their project work for the season.

These exhibits were judged by five instructors and the following prizes were awarded.

Gold medal to Student Muniak.

Silver medal to Student Addison.

Bronze medal to Student Buhle.

An address by Mr. Franklin E. Heald, State agent for teacher training was most interesting. It made clear to the students:

1. That we all have the collecting habit.

2. That a hobby is worth while as a means of breaking up the drudgery of the day.

3. That there have been many scientific contributions made by ordinary farmers who have observed things often by accident and have connected up the occurrence to their work on the farm.

The success of this day is made evident by the number of students who have already signified their intentions of making a collection of things for the next Science Day.

RESISTANT CHESTNUT TREES.

The chestnut as a timber tree, owing to the ravages of the parasite fungus disease (endothia parasitica) has disappeared from its northern range and is rapidly being exterminated southward. Here and there, there are native chestnuts which still have a portion of their top and branches alive, in spite of the fact that disease has been present for ten years or more. Dr. Perley Spaulding, forest pathologist of the U. S. Forest Experiment Station at Amherst, says that this indicates that these trees are more or less resistant to the disease and desires to receive information concerning the location of such trees with the idea of getting nuts or cuttings from them with which to begin the breeding of resistant trees. This sort of thing has been done with other kinds of plants and may be possible with trees. Dr. Spaulding also suggests that when cutting chestnut timber that trees which still have some life be left standing so that if they do happen to have disease resistant qualities in them they will have an opportunity to propagate themselves. The number of such trees is small and will never be missed from the lumber pile.

H. O. COOK,
Extension Forester.

INTERCLASS TRACK MEET SUCCESSFUL

Horace Shute of West Newbury Wins Most Points for the Boys. Miss Alice DeCraney of Lynn For the Girls.

First Prize Winners GIRLS

50-Yard Dash—M. Hawkes 7 1/5s.
Basketball Shot Put—A. DeCraney, 53 ft. 6 in.

100-Yard Dash—M. Hawkes.
High Jump—L. Vance, 3 ft. 8 in.
Running Broad—D. Burnham, 11 ft. 5 in.

Three Legged Race—R. Erickson and T. Sewell.

BOYS

100-Yard Dash—Emerson, 11 2/5 s.
Mile Run—Richardson, 5 m. 18 3/5s.
Quarter Mile Run—Shute, 1 m. 4 1/5 s.

High Jump—D. Rogers, 5 ft. 1 in.
Shot Put—Luce, 33 ft. 10 1/2 in.
Half Mile—Richardson, 2.25 2/5 s.
220-Yard Dash—Shute, 29 3/5 s.

Running Broad—Shute, 17 ft. 6 in.
The Juniors won the Boys' Fence Climb; the Sophomores won the Boys' Relay Race, and the Senior girls won the three-legged race.

The Senior class won the annual interclass track meet receiving 73 points in the final score. Juniors 69 1/2, Freshmen 8 1/2. Horace Shute of West Newbury was high point winner for the boys, earning a total of 23 points. Miss De Craney was high point winner for the girls, earning a total of 20 points.

GRADUATING CLASS

Agricultural Department Candidates for Diplomas

Richard V. Ashton, Salem.
Forrest Edward Carter, Wakefield.
Andrew Coukos, Lynn.
Harold Cummings Dowding, Methuen.
Chester Dahl Hansen, Beverly.
Spencer Elson Hunnewell, Saugus.
Robert Russell Lewis, Andover.
Roger Herbert Lewis, Andover.
Franklin Livermore, Lynn.
Theodore Philip McNichol, Lynn.
Norman Randolph Morgan, Methuen.
Joseph Charles Murphy, Beverly.
Irving Thorne Nichols, Gloucester.
Roland Bachelder Plummer, Newbury.
Laurier E. Rafuse, Lynn.
James Babson Silva, Jr., Rockport.
William Elliot Stowell, Lynn.
Nathaniel Dow Trow, Beverly.
Calvin M. Watson, Topsfield.

Homemaking Department Candidates for Diplomas

Stella R. Burbine, Beverly.
Alice Maude Coleman, Peabody.
Marion Harriette Dow, Lynn.
Doris Jennie Garland, Newburyport.
Ruth Frances Gay, Lynn.
Christine Gilman, Lawrence.
Margaret C. Greenleaf, Lynn.
Ethel Leonora Howard, Swampscott.
Mabel Martina Lewis, Nahant.
Florence Mason, Marblehead.
Esther Louise Meyers, Lynn.
Georgina Rae Reid, Georgetown.
Mary Louisa Scarlett, Lynn.
Gertrude Alice Smith, Methuen.
Miriam Clifford Stone, Ipswich.
Ethel Dorothy Thompson, Newburypt.

Candidates for Certificates

High School Graduate Special Course
Jean B. Blake, Gloucester.
Sarah Caroline Burnham, Essex.
Virginia Poore Davis, West Newbury.
Ruth Evelyn Gould, Merrimac.
Mary Betsey Howard, Essex.
Mary Hilda Noyes, West Newbury.
Emma Lydia Rix, Danvers.
Gertrude Carolyn Stone, Marblehead.
Bertha W. Wilkins, Salem.

ALUMNI DIRECTORY

In a recent attempt to revise our alumni directory many letters were returned unopened. To complete our records we need the present mail address of the following graduates:

Saul R. Freeman, Class of 1917
Donald Hodgdon, Class of 1917
Donald A. Snow, Class of 1916
A. Everett Bascom, Class of 1916
J. Houston Lovett, Class of 1918
Mrs. Elizabeth Stensrud, Class of 1920
Arlene Fowler, Class of 1923
Mrs. William Todd, Class of 1917
Hope Ham, Class of 1921
Marjorie Harrigan, Class of 1922
Evelyn Newhall, Class of 1924

EXTENSION SERVICE

WINTER CLUB DRIVE IS ON

All the Old Members and Many New Ones Wanted

The winter months are coming on and we must get the 4-H Club machine rolling along again. Not that club work ceases in summer but it always takes a new lease of life at the approach of winter.

The problem of local leadership is always a difficult one. But in every community there is always some one who is willing to lead boys and girls along the worthwhile paths. The County Club Agent would be glad to hear from anyone who would like to help as a local leader. The poem on this page is quoted from the Hampden County Extension News and voices our plea for local leaders.

WHERE IS THE WOMAN TO LEAD?

There isn't a girl but wants to grow
Brave and true at heart;
And every girl would like to know
The secret we impart.
She doesn't desire to slack or shirk.
Oh! Haven't you heard her plead?
She'll follow a woman at play or work
If only a woman will lead.

Where are the women to lead today,
Sparing an hour a week,
Teaching the girl the game to play
That will keep her strong and neat?
Streets and shops are calling "come"
Here are the girls indeed;
Who can tell what they might become
If only the women will lead.

Motor and bridge and dance and tea
Fill up the time I know;
But wouldn't you like to feel you'd
taught
A little mother to sew?
Country and home depend on you,
Character most we need;
How can a girl know what to do
If there isn't a woman to lead?

HENS IN CLEAN NESTS PRODUCE MORE EGGS

An egg in the nest is worth two in the bird, so it behooves the poultryman to pay proper heed to the laying quarters he provides for his hens. In the nest itself is often found the secret of success as a poultryman, for it is largely the condition of their equipment that determines whether the eggs laid are to bring a profit on the market. The first maxim of every poultryman should be, "A clean nest and a dark one" if he is to get a maximum of high-grade eggs.

Hens will not usually eat eggs if their nests are sufficiently darkened. Hen egg-eaters want plenty of light.

COLDS

This is the time of year when fall colds make their appearance in the poultry flock. The inclement weather, typical of the fall season, is ideal for their development. Considerable loss may result if the birds are not properly and immediately taken care of. The first step should be to remove any possible cause, such as drafts or moisture. Then the birds must be treated for the ailment. A watery discharge from the nostrils, watery eyes, heavy breathing or a rattling in the throat at night are typical indications of fall colds. Some form of disinfectant should be used to prevent the disease from spreading. Permanganate of potash is very good when first mixed but it oxidizes rapidly in open vessels and loses its value. It should always be used in earthen or wooden container. If it is to be used the water should be withheld until about eleven o'clock. The birds will be exceedingly thirsty by that time and will flock to the water dish. In their efforts to get the water the birds will thoroughly disinfect each other. A few drops of kerosene on water is also a good disinfectant and will not lose its value in standing. The difficulty which presents itself in the use of kerosene is the lessened palatability of the water. In individual treatment a ten per cent solution of argyrol is as effective a cure as is known. A medicine dropper can be used to place a few drops in the eyes, mouth or nose whenever the cold may appear.

GREEN FOOD

The matter of supplying green food to the layers this fall and winter is a problem which should be seriously considered by poultrymen at this time. While birds will live and lay without green food, it has been found to be of a decided advantage to feed it. In selecting the type of green food to be fed it is necessary that you consider more than the palatable and succulent qualities.

Mangel beets are commonly used, probably due to the fact that they are more easily stored than cabbage and easier fed than sprouted oats. While mangels are succulent and palatable, their vitamin A content is practically nil. Many poultrymen have become discouraged attempting to sprout oats, due to the difficulty experienced in procuring a grade of oat that will sprout. Cabbages are probably the most valuable green food, due to their high vitamin A content. If a poultryman could construct a simple root cellar in which cabbages could be stored it would undoubtedly prove a profitable

THE SOY BEAN

One problem before the School farm is to raise more hay. To solve this, we must go back on the hill, clear off some brush and stones and bring the soil into fertility.

Any one who has handled cows knows that the average animal does not give enough manure to keep the land in the state of fertility that will raise enough food to keep her at a high state of production. For this reason it becomes necessary to use other things in addition.

The School raises soy beans to be used with corn in the silo. This year we raised three acres of soy beans and eleven acres of corn.

An example of our experience will show why we did this. In the spring of 1924, we pulled out several long rows of gooseberries (maybe a third of an acre). This field, of which the gooseberries were a part, was planted to soy beans. The yield of beans where the berries had been, was poorer than the rest of the field, as the gooseberries were a rank feeder. The spring of 1925, the land was not treated with manure, but plowed and planted to corn. The results have been as follows: The corn on the soy bean land has been over a foot higher, stouter and greener than corn on the next piece, which had been manured, and had a crop of rye plowed under just before the corn was planted. All other growing conditions were equal in both pieces.

Since the silo will hold up to 50 per cent corn, and 50 per cent soy beans, we will increase the acreage of beans. We feel that we are on the right track to find an economical supplement to barnyard manure.

The variety used in the past has been the medium green. As this is a late maturing variety, it does not mature in Essex County, but does produce a large growth. The chief difficulty is the cutting of the plant. It grows in a tangled mass, making it impossible for one man alone to cut it with a mowing machine. We have been trying two other varieties, i. e., Ito San, and the Black Manchu. These varieties grow less plant but more bean. Our experience of one year has been that these varieties stand more upright, and that one man with a mowing machine can cut them. This is important because hand cutting by the average farmer, with a large bean acreage is a prohibitive expense.

investment. Cabbages are probably cheaper to buy in most sections than mangels.

HOMEMAKING DEPARTMENT

School and Graduate Activities

Two new teachers have been added to the faculty to take the place of the two who resigned last June. Mrs. Alice Gerard of Boston is the head of the Sewing Division and Miss Katherine Beecher of Lawrence has the academic and athletic instruction in charge.

Miss Mary Searlett of Lynn, Class of '25, and Miss Bertha Wilkins of Salem, High School Special Class '25, are attending Nasson Institute at Springvale, Maine.

Miss Hazel Eastman of Lynn, Class of '24, who took a special one year course at the Lynn Classical High, is now at Framingham State Normal School where she is preparing to become a vocational teacher.

Miss Jean Blake of Gloucester, High School Special, Class '25, is taking a course in dietetics at the Essex Sanitarium, Middleton, Mass.

Miss Virginia Davis of West Roxbury, High School Special, Class '25, has entered the Vocational Department at Framingham State Normal School.

During the first two weeks, the students in the Homemaking Department were taught all kinds of preserving, and now are able to make jelly, conserve, and piccalilli as well as to can fruits and vegetables. Each student has a home assignment in canning, and in that way, demonstrates that she has learned the art.

During the first nine days of the fall term the students at school have canned 24 glasses of orange marmalade, 158 glasses of jelly of different kinds, 39 glasses of conserve, 61 quarts of vegetables, 82 quarts of different kinds of piccalilli, chili sauce, and relishes; making in all, 446 jars of food which will be served in the dining and lunch rooms during the school year.

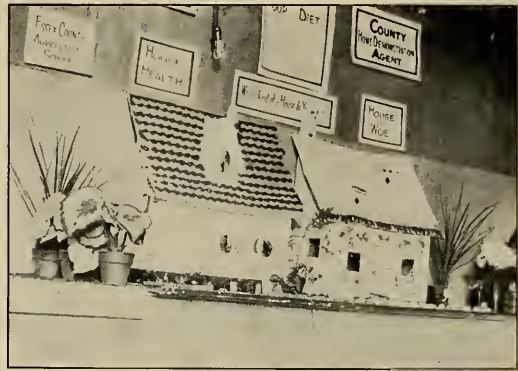
Honor Roll for First Quarter.

Nov. 20, 1925.

Bessie Hadley, Essex	91.8
Katherine Baillie, Andover	90.9
Arlene Pilkington, Methuen	90.9
Viola Richardson, Groveland	90.0
Evelyn Shaw, Groveland	89.9
Mildred Littlefield, Danvers	89.6
Edith Hall, Amesbury	89.5
Hazel Henderson, Lawrence	89.3
Ruth Holt, North Andover	88.9
Doris Griffin, Rockport	88.7
Dorothy Mattheson, Lawrence	88.4
Mildred Russell, Danvers	87.8
Evelyn Scobey, Danvers	87.8
Annabelle McLelland, Beverly	87.2
Doris Montrose, Lynn	87.0

ELLA S. MORRILL,

Ed. Manager.



A Unique Health Exhibit

MILLINERY

Practically all the new fall shapes for hats have brims and they are varied by folds, creases, splits and by being caught up to the crown. Soft contours predominate and there are many off-the-face shapes. The hats are made combinations of velvet with other materials, and in the use of metallic ribbons in conjunction with metal paints and other metallic decorations.

Metalized kid and cloth are exploited in all the showing of new millinery. Flat glass bead ornaments are very effective, showing a variety of colors in geometric or conventional flower forms, and there is great variety in fancy pins, especially those with double heads, which are set quite close together.

Hats as a rule are in tones of the colors in the coats, some of these simply trimmed, but others considerably elaborated with embroidery, feather fancies, velvet motifs, or velvet ribbon trims to bring them up to the level of the coats in importance. Deep and rich colors are in demand and there is little call for black. The favored colors will be vivid blues, reddish purples, deep greens and reds.

ARE THESE BOOKS IN YOUR LIBRARY?

"Mountain Verities," by Sephine Humphrey. E. P. Dutton Co., \$2.00.

"Libraries should invest in at least four copies—one to fit in (cheek by jowl) with the most up-to-date books on household management; one under recreative reading; another for the rural economics section; the fourth under either philosophy or religion—budget under "Higher Life."

ANNETTE C. DIMOCK.

WHAT HOUSE DO YOU LIVE IN?

The above picture shows an exhibit recently prepared by the Home Demonstration Agent. The House of Health is made attractive with its good foundation of prunes and apricots, its roof of graham crackers and ginger cookies and its milk bottle chimney. The lawn of shredded wheat is enclosed by a fence of carrot posts and nut bars. The walk of rice leads up to steps made of entire wheat sandwiches. Windows having blinds of entire wheat bread are draped with lettuce leaves. Urns of apple and tomatoes filled with parsley and spinach decorate the lawn.

In contrast to this House of Health is the House of Woe with its poor foundation of doughnuts, and a roof edged with pickles. The lawn of coffee fenced with cheap candies is decorated with shrubs of lollipops. Steps made of pastry turnovers lead up to the house. This house silently speaks of poor diet and its results. The kind of food we eat will determine in which house we live. Behind this fanciful exhibit is a real message for both parents and children.

RECENT ACCESSIONS TO THE LIBRARY

Americans by Adoption—Husband. Science of Eating—McCann. Bible Selections—Buell & Wells. Dairy Farming Projects—Ladd. Educational Psychology—Starch. Practical Farm Economics—U.S.D.A. Engineering on the Farm—Stewart. Landscape Gardening—Waugh. Food for Plants—Myers. Supervision and the Improvement of Teaching—Burlow. Art in Everyday Life—Goldstein. Kelsey's Rural Guide.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 7

HATHORNE, MASS., MARCH 1926.

No. 1

AGRICULTURAL ENGINEERING

Advisory Council Appointed for Investigation of Research

Recognizing that improvement in the equipment for farm work requires research and experimentation and that such investigation throughout the county should be organized on a better basis, Secretary of Agriculture, Jardine, has appointed an advisory council of twenty men whose first efforts are now under way in finding out what has been done along this line and in outlining that program for future work that will serve as a guide to the experiment stations, farm implement industries and other agencies concerned in the fundamental engineering problems of this field.

The advisory council includes eight members of the American Society of Agricultural Engineers, eight members of the National Association of Farm Equipment Manufacturers, and three representatives of the United States Department of Agriculture, besides the chairman, Prof. J. B. Davidson, head of the Department of Agricultural Engineering, Iowa State College, Ames, Iowa.

Professor Davidson's inquiry has reached the school and a reply has been returned. However, should the need for any new machine, device or for improvement in existing equipment be uncovered, notice of it will be forwarded to the council at any time.

It is recognized that needs for improvement are most apt to occur to those who use the equipment and it is therefore hoped that any farmers or others who have any suggestions to make, will communicate with the School.

An important function of this Agricultural Engineering Research Council will be to act as a clearing house to prevent duplication of effort.

PRIZE WHEAT BREAD

At the meeting of the Extension Department on Jan. 20th, a part of the lunch was provided by the Home-making Department. The entire wheat bread made by Bernice Whit-tier of Ipswich was judged 100% by Miss Birdseye, National Food Specialist.



A WINTER SCENE IN ESSEX COUNTY

This is another beautiful woodland scene as it appears during the winter season. The picture was taken in Essex County by Mr. Charles Spofford of Danvers, and again emphasizes the fact that we need not go very far from home to see nature at her best.

ANNUAL FARMERS' DAY MARCH 10TH

The twelfth annual Farmers' Day will be observed at the School on Wednesday, March 10th. Plans are now complete for what would appear to be one of the best sessions ever held. It would appear that the trade exhibits and the various educational displays will be of a very high order.

The Essex County Electrical Club will make special effort to have their exhibition and services of value. In

addition to a varied display and demonstration apparatus, there will be two men assigned to explain repair work and the detection of trouble.

The National Cement Association will furnish men to demonstrate the use of cement and cement tile in farm construction work. They will be prepared to answer questions concerning problems and difficulties in cement work.

The speaking program appears to be a particularly strong one. The morning speaking program will commence at 11 o'clock. Director Sidney B. Haskell, of the Mass. Experiment Station, will speak on the results obtained in experimental station work, and their application to the farm. After the noon lunch, which will be on the basket lunch plan, there will be four sections conducted simultaneously, namely, homemakers, fruit growers, poultry men, and dairy and general farms. Strong speakers have been engaged for each section—men and women who are qualified to carry a distinct message to their audiences.

Exhibits will be in place by 9.30, and ample opportunity will be given to study the exhibit and meet the trades men all day long.

The management expects to accommodate the largest audience which has ever participated in Farmers' Day.

TWELFTH ANNUAL FARMERS' DAY

at the

Essex County Agricultural
School

WEDNESDAY, MARCH 10th

Fine Speaking Program
Good Educational Displays
Varied Trade Exhibits

SPECIAL FEATURES

Big Electrical Appliance Exhibit
Speaker on Better Use of Electricity on Farms

Demonstration of the Use of Concrete on the Farm

Sections for Homemakers, Fruitmen, Poultrymen, Dairymen, etc.

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CALENDAR

- Mar. 8. Third term opens, Home-making Dept.
Mar. 10. Twelfth Annual Farmers' Day at School.
Apr. 19. Holiday. Patriots' Day.
Apr. 30. Close of classroom work, Agricultural Dept.
May 10. Fourth term opens, Home-making Dept.
June 2. Better Homes Day at School.
June Parents' Day, Homemaking Dept.
June Field meeting and outing Boston Market Gardeners' Association.
Aug. 5. Essex Pomona Field Meeting at School.

TRAINING FOR EVERYONE

Last year, we learned that the Extension Division of the Mass. Department of Education, enrolled over seventy thousand students in their courses.

In the city of Gloucester, we learn that there are over one thousand persons in the night schools. Since Gloucester has a population of twenty thousand, this means that more than one person in every twenty-five is definitely taking courses of instruction the present winter. This is surely a wonderful record.

We wonder if more should not take advantage of the splendid opportunities which are offered in addition to the above courses given by the State Department of Education.

The Massachusetts Agricultural College is prepared to give correspondence courses in the various lines of work in connection with agriculture and home economics. These courses are well outlined; the material is prepared in a very careful and clear manner and the instruction is given by the

use of clear cut instruction sheets and by reference to standard textbooks. This School is prepared to offer definite instruction on certain lines of agricultural work.

If you are interested, Mr. and Mrs. Reader, why not write to the County School for information in regard to the three lines of instruction above outlined?

BREVITIES FOR THE VEGETABLE ENTHUSIAST AND MARKET GARDENER

During the winter months when the evenings are longer and work is not as pressing to the grower, one naturally thinks towards another year of planning his crops. The past season has developed an increased interest to several new and promising varieties.

Golden Acre cabbage is a new variety which matures a week to ten days earlier than the Copenhagen Market which has always been considered a good early variety. The heads average 2-3 lb. as against 3-4 lb. of the Copenhagen Market. As the head is smaller, it is a good variety to market in the bushel box, or particularly good in size for the small family.

Des Moines, a small acorn shaped, dark green squash averaging 5-6 in. long and 4 inches in diameter, has caused much favorable comment to those who have grown them as they are very productive, excellent for pies, and good to be cooked whole when young.

WE NOTED AT THE SCHOOL WEATHER STATION

1. That the warmest day in December was Dec. 6. Maximum 56 degrees.
 2. That the coldest day in December was Dec. 27. Minimum 3 degrees below.
 3. That the total rainfall for December was 6.53 inches. Unusually high for the month.
 4. That the total rainfall for 1925 was 43.48 inches. Practically the normal amount.
 5. That the hottest day of 1925 was June 6. Maximum 98 degrees.
 6. That the coldest day of 1925 was Jan. 29. Minimum 4 degrees.
 7. That the wettest month of 1925 was March, 7.18 inches.
 8. That the driest month of 1925 was May, 1.75 inches.
- For January 1926 (up to the 26th): Maximum temperature, 53 degrees, (Jan. 18, 19); minimum temperature, 5 degrees (Jan. 23); snowfall about 6 inches. Total precipitation, 2.24 inches. Normal 3.83 inches (for month). Total hours sunshine, approximately 131 hours (up to 26th). Total possible sunshine, approximately 235 hours (up to 26th).

ATHLETICS AT ESSEX AGGIE

Interest in athletics at Essex Aggie is again at a high point this winter, being divided between basketball and hockey.

There are eight basketball teams in School and two hockey teams. The class basketball league is headed up by the following captains: Roscoe McKenna for the Seniors; Fred Walker as Captain of the Junior team; Andrew Baillie is a leader of the Sophomore team, and Joseph Finocchio has organized the Freshman team.

The school team is divided into the Varsity and the second team, and Coach Page says he has the best group of boys on his squad that have ever been out for basketball at Aggie; and then, of course, there is the aged faculty team which is the only undefeated team at present at the School and our newest basketball team are calling themselves "The Red Heads."

The basketball squad is composed of the following boys, representing all sections of Essex County: Andrew Baillie, Howard Bredbury and Wallace Rennie of Andover; Bernard Collins of Salem; Albert Egerton of Beverly; Francis Eldridge of Georgetown; Thomas Gould, Harry Lear, Roscoe McKenna, George Rippon of Lynn; Clifford Sewell of West Lynn; Captain Ardashar Kochakian of Haverhill; John McNair of Gloucester; Robert Sproull and Douglas Rogers of Byfield; Arthur Wentworth of Peabody, and William Wilson of Methuen.

The hockey squad is also county wide in its list of players.

Captain George Ward, and Aubrey Vaughan of Lynn; Fred Walker, William Brown of Marblehead; G. Stanley Smith from Rowley; Harry Nelson from Cliftondale; Ashton Danforth from Peabody; Donald Lewis from Nahant; Sidney Butler from Methuen; Walter Richardson from Salem; Walter Smallwood from Groveland; Benjamin Robinson from Middleton, and Nathan Hale and Maynard Haley from Rowley.

The basketball team is under the student management of Arthur Sevigny of Hathorne, and the hockey team is managed by George Morse of Georgetown. Nathan Lassman is the leading candidate for assistant manager of basketball and is a Haverhill boy. John Baillie is likewise assistant manager of the hockey squad.

THE ESSEX COUNTY AGRICULTURAL SCHOOL ALUMNI ASSOCIATION

will hold an

ENTERTAINMENT AND DANCE
At Hathorne, April 9th, 1926

Good Music Good Time
Admission 50c 7.45 P. M.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 7

LATHORNE, MASS., MARCH 1926.

No. 1

AGRICULTURAL ENGINEERING

Advisory Council Appointed for Investigation of Research

Recognizing that improvement in the equipment for farm work requires research and experimentation and that such investigation throughout the country should be organized on a better basis, Secretary of Agriculture, Jardine, has appointed an advisory council of twenty men whose first efforts are now under way in finding out what has been done along this line and in outlining that program for future work that will serve as a guide to the experiment stations, farm implement industries and other agencies concerned in the fundamental engineering problems of this field.

The advisory council includes eight members of the American Society of Agricultural Engineers, eight members of the National Association of Farm Equipment Manufacturers, and three representatives of the United States Department of Agriculture, besides the chairman, Prof. J. B. Davidson, head of the Department of Agricultural Engineering, Iowa State College, Ames, Iowa.

Professor Davidson's inquiry has reached the school and a reply has been returned. However, should the need for any new machine, device or for improvement in existing equipment be uncovered, notice of it will be forwarded to the council at any time.

It is recognized that needs for improvement are most apt to occur to those who use the equipment and it is therefore hoped that any farmers or others who have any suggestions to make, will communicate with the School.

An important function of this Agricultural Engineering Research Council will be to act as a clearing house to prevent duplication of effort.

PRIZE WHEAT BREAD

At the meeting of the Extension Department on Jan. 20th, a part of the lunch was provided by the Home-making Department. The entire wheat bread made by Bernice Whittier of Ipswich was judged 100% by Miss Birdseye, National Food Specialist.



A WINTER SCENE IN ESSEX COUNTY

This is another beautiful woodland scene as it appears during the winter season. The picture was taken in Essex County by Mr. Charles Spofford of Danvers, and again emphasizes the fact that we need not go very far from home to see nature at her best.

ANNUAL FARMERS' DAY MARCH 10TH

The twelfth annual Farmers' Day will be observed at the School on Wednesday, March 10th. Plans are now complete for what would appear to be one of the best sessions ever held. It would appear that the trade exhibits and the various educational displays will be of a very high order.

The Essex County Electrical Club will make special effort to have their exhibition and services of value. In

addition to a varied display and demonstration apparatus, there will be two men assigned to explain repair work and the detection of trouble.

The National Cement Association will furnish men to demonstrate the use of cement and cement tile in farm construction work. They will be prepared to answer questions concerning problems and difficulties in cement work.

The speaking program appears to be a particularly strong one. The morning speaking program will commence at 11 o'clock. Director Sidney B. Haskell, of the Mass. Experiment Station, will speak on the results obtained in experimental station work, and their application to the farm. After the noon lunch, which will be on the basket lunch plan, there will be four sections conducted simultaneously, namely, homemakers, fruit growers, poultry men, and dairy and general farms. Strong speakers have been engaged for each section—men and women who are qualified to carry a distinct message to their audiences.

Exhibits will be in place by 9.30, and ample opportunity will be given to study the exhibit and meet the trades men all day long.

The management expects to accommodate the largest audience which has ever participated in Farmers' Day.

TWELFTH ANNUAL FARMERS' DAY at the Essex County Agricultural School WEDNESDAY, MARCH 10th

Fine Speaking Program
Good Educational Displays
Varied Trade Exhibits

SPECIAL FEATURES

Big Electrical Appliance Exhibit
Speaker on Better Use of Electricity on Farms
Demonstration of the Use of Concrete on the Farm

Sections for Homemakers, Fruitmen, Poultrymen, Dairy men, etc.

Essex Farmer and Home Maker HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

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CALENDAR

- Mar. 8. Third term opens, Home-making Dept.
- Mar. 10. Twelfth Annual Farmers' Day at School.
- Apr. 19. Holiday. Patriots' Day.
- Apr. 30. Close of classroom work, Agricultural Dept.
- May 10. Fourth term opens, Home-making Dept.
- June 2. Better Homes Day at School.
- June Parents' Day, Homemaking Dept.
- June Field meeting and outing Boston Market Gardeners' Association.
- Aug. 5. Essex Pomona Field Meeting at School.

TRAINING FOR EVERYONE

Last year, we learned that the Extension Division of the Mass. Department of Education, enrolled over seventy thousand students in their courses.

In the city of Gloucester, we learn that there are over one thousand persons in the night schools. Since Gloucester has a population of twenty thousand, this means that more than one person in every twenty-five is definitely taking courses of instruction the present winter. This is surely a wonderful record.

We wonder if more should not take advantage of the splendid opportunities which are offered in addition to the above courses given by the State Department of Education.

The Massachusetts Agricultural College is prepared to give correspondence courses in the various lines of work in connection with agriculture and home economics. These courses are well outlined; the material is prepared in a very careful and clear manner and the instruction is given by the

use of clear cut instruction sheets and by reference to standard textbooks. This School is prepared to offer definite instruction on certain lines of agricultural work.

If you are interested, Mr. and Mrs. Reader, why not write to the County School for information in regard to the three lines of instruction above outlined?

BREVITIES FOR THE VEGETABLE ENTHUSIAST AND MARKET GARDENER

During the winter months when the evenings are longer and work is not as pressing to the grower, one naturally thinks towards another year of planning his crops. The past season has developed an increased interest to several new and promising varieties.

Golden Acre cabbage is a new variety which matures a week to ten days earlier than the Copenhagen Market which has always been considered a good early variety. The heads average 2-3 lb. as against 3-4 lb. of the Copenhagen Market. As the head is smaller, it is a good variety to market in the bushel box, or particularly good in size for the small family.

Des Moines, a small acorn shaped, dark green squash averaging 5-6 in. long and 4 inches in diameter, has caused much favorable comment to those who have grown them as they are very productive, excellent for pies, and good to be cooked whole when young.

WE NOTED AT THE SCHOOL WEATHER STATION

1. That the warmest day in December was Dec. 6. Maximum 56 degrees.
2. That the coldest day in December was Dec. 27. Minimum 3 degrees below.
3. That the total rainfall for December was 6.53 inches. Unusually high for the month.
4. That the total rainfall for 1925 was 43.48 inches. Practically the normal amount.
5. That the hottest day of 1925 was June 6. Maximum 98 degrees.
6. That the coldest day of 1925 was Jan. 29. Minimum 4 degrees.
7. That the wettest month of 1925 was March, 7.18 inches.
8. That the driest month of 1925 was May, 1.73 inches.

For January 1926 (up to the 26th): Maximum temperature, 53 degrees, (Jan. 18, 19); minimum temperature, 5 degrees (Jan. 23); snowfall about 6 inches. Total precipitation, 2.24 inches. Normal 3.83 inches (for month). Total hours sunshine, approximately 131 hours (up to 26th). Total possible sunshine, approximately 235 hours (up to 26th).

ATHLETICS AT ESSEX AGGIE

Interest in athletics at Essex Aggie is again at a high point this winter, being divided between basketball and hockey.

There are eight basketball teams in School and two hockey teams. The class basketball league is headed up by the following captains: Roscoe McKenna for the Seniors; Fred Walker as Captain of the Junior team; Andrew Baillie is a leader of the Sophomore team, and Joseph Finocchio has organized the Freshman team.

The school team is divided into the Varsity and the second team, and Coach Page says he has the best group of boys on his squad that have ever been out for basketball at Aggie; and then, of course, there is the aged faculty team which is the only undefeated team at present at the School and our newest basketball team are calling themselves "The Red Heads."

The basketball squad is composed of the following boys, representing all sections of Essex County: Andrew Baillie, Howard Bredbury and Wallace Rennie of Andover; Bernard Collins of Salem; Albert Egerton of Beverly; Francis Eldridge of Georgetown; Thomas Gould, Harry Lear, Roscoe MacKenna, George Rippon of Lynn; Clifford Sewell of West Lynn; Captain Ardavast Kochakian of Haverhill; John McNair of Gloucester; Robert Sproull and Douglas Rogers of Byfield; Arthur Wentworth of Peabody, and William Wilson of Methuen.

The hockey squad is also county wide in its list of players.

Captain George Ward, and Aubrey Vaughan of Lynn; Fred Walker, William Brown of Marblehead; G. Stanley Smith from Rowley; Harry Nelson from Cliftondale; Ashton Danforth from Peabody; Donald Lewis from Nahant; Sidney Butler from Methuen; Walter Richardson from Salem; Walter Smallwood from Groveland; Benjamin Robinson from Middleton, and Nathan Hale and Maynard Haley from Rowley.

The basketball team is under the student management of Arthur Sevigny of Hathorne, and the hockey team is managed by George Morse of Georgetown. Nathan Lassman is the leading candidate for assistant manager of basketball and is a Haverhill boy. John Baillie is likewise assistant manager of the hockey squad.

THE ESSEX COUNTY AGRICULTURAL SCHOOL ALUMNI ASSOCIATION

will hold an

ENTERTAINMENT AND DANCE

At Hathorne, April 9th, 1926

Good Music Good Time

Admission 50c

7.45 P. M.

HOME DEMONSTRATION AGENT

HOMEMAKERS TRAINED AS LOCAL LEADERS

State Nutrition Specialist Conducts Meetings

One of the outstanding pieces of work initiated during January was the starting of two projects conducted on the Local Leader basis—one in Nutrition and one in Children's Clothes.

While other counties have conducted Home Demonstration Work in this way with success, Essex County has done little.

Much credit should be given these women who have volunteered to carry back to their communities, help which they have received from the specialists. Their interest and enthusiasm will surely reach not only the groups which they have organized, but will be felt throughout their community.

Five communities have been organized for the Children's Clothes project with forty-nine women enrolled and six communities for the Meal Planning project with seventy-two women enrolled. The following communities are represented: Groveland, South Groveland, Riverside (Haverhill), West Boxford, West Newbury, Danvers, Danvers Highlands, Middleton, North Andover, South Peabody and Beverly.

A BEAUTY SECRET

Why not let Dame Nature paint your cheeks from within? She can do it with the aid of vegetables, fruit, and the whole cereals. To have a good complexion, the owner must have good red blood, and one of the necessary ingredients of red blood is iron.

The leafy vegetables are our best sources of iron, besides being valuable for other reasons. At this season of the year we will have to depend upon cabbage, lettuce, spinach and canned greens for leafy vegetables. A very cheap source of all necessary minerals is bread made from whole grains. Of course, bread is a very concentrated food, also rich in starch which gives energy, and protein which builds and repairs muscles. Dried peas and beans furnish many minerals, including iron, in liberal amounts. Egg yolk is one of our best sources of this most necessary mineral, and lean meat, providing the blood is eaten also, furnishes considerable iron. The dried fruits which are brown in color, particularly prunes, dates and raisins contain iron. Even the humble carrot contains a good deal, and old-fashioned cooking molasses, another food easy to get, is a good source.

A physician famed for his treatment of anemia, a disease in which the blood lacks red blood corpuscles, recommends as a part of his diet, "a poached egg on spinach, on whole wheat toast daily."

Are you getting your supply of iron?

BETTER HOMES DAY JUNE 2

Now that you have your calendar for 1926, put a mark around June 2nd and be sure and save that date for our third Better Homes Day. Already Dr. Caroline Hedger of Chicago has been engaged for our big speaker.

CHILDREN'S CLOTHES

Purpose of the Children's Clothes Project

The purpose of this project is to study the principles which should underlie all intelligent selection, care and construction of garments for small children. Through this study and the practical work which is included with it, it is hoped to increase the number of mothers who select for their children garments which are healthful, comfortable, attractive, easy to make and reasonable in price.

The work as given will deal with garments for children of pre-school age, from 2 to 6, but can easily be adapted to the school child.

The project is planned for six or eight half-day meetings. Some of the interesting points taken up are material for children's clothes, use of commercial pattern, one hour bloomer dress, rompers, and decorative stitches.

Boys' clothes will be studied, ready-made and home-made clothes will be compared, and the hygiene of children's clothes will be emphasized.

The Children's Clothes project so far as possible will be conducted by local leaders trained by Mrs. McIntire, our Clothing Instructor.

EXTENSION NOTES

We are glad to welcome South Groveland and Riverside (Haverhill) into the Extension family. Their local leaders for the Children's Clothes project are Mrs. Charles Sweetser, Mrs. Chester Hallock with Mrs. Herbert Brown and Mrs. Milton Wright.

For the first time Danvers Highlands as a community is co-operating with the Extension Department. Mrs. Frank T. Ferguson, Mrs. Edward Reed and Mrs. Jasper Marsh are conducting the Meal Planning project with a large group of homemakers.

MEAL PLANNING EVERY HOME-MAKER'S PROBLEM

Extension Service Plans Nutrition Meetings That Will Help Every Member of the Family

The aim of the Meal Planning Project is to help the homemaker with her everyday problem of planning and preparing the three meals a day in such a way that her family may receive the right kind of food with the least expenditure of time and money.

The project includes a series of four meetings. At the first meeting the family food habits are scored and the question answered, "How much and what kind of food shall we have?"

At the second meeting the essentials of good nutrition are discussed.

At the third meeting suggestions are given as to methods of overcoming food prejudice in the home.

The question discussed at the fourth meeting is "How shall we use this knowledge in planning, preparing and serving of meals?"

There will be a simple demonstration at each meeting. Many recipes will be given suggesting attractive ways in which the homemaker may prepare foods essential to the health and happiness of the family.

If the homemakers in your community desire this help, your town chairman will be glad of your assistance in organizing a group. If you do not know the name of your town chairman, ask your Home Demonstration Agent at the Essex County Agric. School, Hathorne.

SLICING APPLES

When slicing apples in quantity, put them into water to which a small amount of salt has been added—two teaspoons to a quart. This will keep them from turning black. The small amount of salt which clings to the apple adds to the flavor.

We were fortunate to have with us at our Nutrition meeting, Miss Miriam Birdseye of Washington, D. C., Nutrition Specialist of the United States Department of Agriculture.

Miss May E. Foley, our new State Nutrition Specialist, in the Extension Department, conducted her first meeting with us on January 20th. Her clear and interesting way of presenting her subject held the attention of the group for the entire day. We all look forward to our second meeting on February 17th.

Mrs. George Mitchell and Mrs. Gardner Wood were ideal hostesses at the meeting of Local Leaders in the Groveland Library on January 14th.

COUNTY AGRICULTURAL AGENT

PRUNING THE APPLE TREE

It is now an accepted practice to prune the longer lived fruit trees, including the apple, to what is known as the modified leader type. The ideal modified leader tree has a main trunk about seven or eight feet high. Beginning at about thirty inches from the ground, seven or eight main foundation branches are spaced on the main trunk. Having the main trunk of this length, gives the scaffold branches a chance to grow without crowding. Limbs six inches apart on a young tree will never be any farther apart, even when the tree is mature. This must be kept in mind when selecting these limbs.

If the young tree has been set as a one-year old whip, it should be pruned at time of setting by simply cutting to a height of thirty-six inches. The following year this tree will have a number of side branches coming out just below where the cut was made. If a two-year old tree has been set, the first shoot may have been cut back in the nursery, and the tree will have this group of side branches at planting. One of these side branches will undoubtedly have straightened out and become the leader. These side branches should be thinned out, leaving at least two and not more than four, as evenly spaced as possible about the trunk, and at a good height.

The leader should be cut off about 20 inches above where the highest permanent branch leaves the trunk. Keep the side branches at least six inches shorter than the leader, and as even in growth as possible. It is a good plan to make each cut obliquely just above an outside bud.

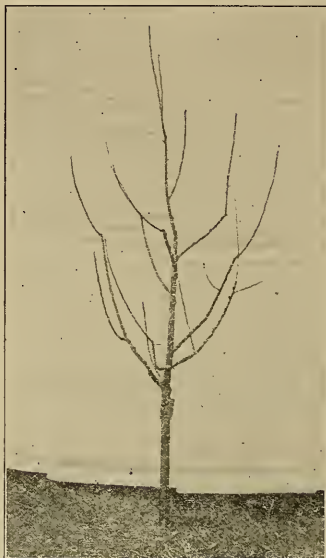
The Second Year's Pruning

The next spring will find a number of new branches developed where cuts were made the preceding year. These new branches will be largest on the main leader, which has been given the advantage of less pruning. If the tree is making a good vigorous growth of say twenty-four inches per season, one of these shoots on the main leader will have continued on, almost straight, as the new leader. This new leader should be cut off again at the point where new scaffold limbs are desired, say about twenty inches above the previous set. Care must be taken to keep the side shoots shorter than the leader, and thinned out to three or four. In case there are too many laterals on the scaffold branches which were left the previous season, these must also be thinned out. Should any of the first founda-

tion branches be growing faster than the rest, prune them to about an equal length.

Third and Fourth Years

In the third and fourth years, the same treatment is repeated, leaving



Northern Spy tree pruned to modified leader form. Age, three years from setting. Planted as a two year tree.

the central branch each year of sufficient length and with a number of scaffold branches. Due to this pruning, a large number of small shoots will come from the main trunk. Since they act as feeders to the trees, they should be left temporarily and kept in absolute check by rather severe pruning. This will prevent them from unduly interfering with the permanent branches.

Later Pruning

When the trunk has reached the desired height, the central leader is cut out above the point where the last scaffold limb leaves the leader. Since the branches at the top of the tree will have a tendency to grow faster from now on than those lower down, the grower will find it necessary to prune heavier on these limbs to keep the whole in balance.

In many younger orchards where no definite plan of pruning has been fol-

lowed, we commonly see trees with two heads. Here two upright growing limbs have been left which are competing for leadership, and consequently will run the tree rather high. To correct this, the less desirable of the two should be removed. The lower scaffold limbs must also be kept in check so they will not again force the leader on, thru competition. From now on, the grower will develop his scaffold limbs on the new leader, based on the principles mentioned in pruning young trees.

Except in corrective pruning, such as is done in renovating an old orchard, or in a young neglected one, pruning should be light, but done annually. Pruning at best is a stunting process but necessary to develop a strong productive tree.

Pruning the Mature Tree

In pruning the mature tree we have a different object in view, namely to properly open it up, to let in sunlight to the fruit spurs and to make it easier to spray effectively. A spur will never form fruit buds unless it receives sunlight on its leaves. The leaves manufacture the necessary plant food, from the sap, and the gasses taken out of the air, only in the presence of sunlight. This food is furthermore stored very close to its point of manufacture, so that food is not carried from one limb to the spurs on another. This will explain the need of opening up the whole of the tree.

In a mature orchard which has received a reasonable amount of care, pruning will consist in the main of removing branches of about an inch in diameter where ever there is too much wood. Many older trees have also developed very high heads, and in that case it will be advisable to bring them down lower by cutting out upright growing limbs and developing a new top lower down. Older trees will usually have some dead limbs which must be removed together with the interfering limbs.

Always make clean, close cuts. Never leave stubs which will rot back. It is well to prune in the fall or early winter as soon as the trees go dormant. Cuts over two inches in diameter should be treated with lead and oil or a special paint on the market for that purpose.

Anyone wishing information on how to prune their orchard, should get in communication with their County Agent at the Essex County Agricultural School, Hathorne.

CAMPAIGN FOR MORE AND BETTER ROUGHAGE

Begun by Extension Service

The Extension Service of the Essex County Agricultural School has started a campaign for more and better roughage. Legume hays, such as the clovers and alfalfa, will receive primary attention but our good English hays and silage will be by no means neglected. Such a campaign calls not only for the growing of these crops in themselves, but also the proper soil fertility and treatment. Good soil fertility will give the large, economical yields per acre and quality as well.

A good fertile soil is the basis of agriculture. When manure is thrown out of doors as made, fully one-half of its fertility is lost. This must be made up with commercial fertility at a high price. By conserving manure in a covered pit and reinforcing it with fifty pounds of acid phosphate per ton, a complete fertilizer is obtained. Fifteen tons of such manure will take the place of thirty, which have been housed out doors and not treated with acid phosphate. Better still, use half a pound per cow of phosphate daily in the gutter and spread manure every day if the land is level and snowfall not too heavy.

Liming is necessary to produce large yields of good roughage. Clovers cannot do as well on acid soils and alfalfa not at all. Every dairyman should use at least a ton of lime every time he seeds down.

Top dress good sod land annually. Most of us apply a lot of fertility when we seed down. Good yields of hay are obtained the first two years, but in five years' time our soil is depleted and we must begin all over again. This practice gets us no where, but by using less the first year and a little every year, we are building our fertility.

Growing legumes means buying less grain and increased yielding power of the soil. These plants have the ability to put nitrogen into the soil at no cost to us whatever. Furthermore they yield more per acre than our English hays.

Your County Agent is very desirous of securing cooperators in this campaign for more and better home-grown feeds. It will mean money in every dairyman's pocket to line up with the School on this project.

ROWLEY CENTRAL SCHOOL

The Rowley Central School continues its good work with five clubs, two clothing and one each of poultry, handicraft and dairy. Principal Milton Howard and Miss Marion Thompson, a teacher, are leading the work.



Young McIntosh tree pruned to open center. A complete loss, due to an ice storm. Pruning to modified leader type prevents this.

AROUND THE COUNTY

J. L. Stewart of Amesbury reports a field which has been in alfalfa for 17 years.

Gilbert Tucker of West Newbury is planning to get another carload of lime for his farm this year.

Mr. A. W. Hayden, manager of the Weathersfield Farm of Danvers, is going to plant five acres of alfalfa this year.

The U. S. Census report shows that in sixteen dairy states, including New England, there was a decrease of 7½% in dairy cows and 32% in dairy young stock during the past five years.

"Lee" Ambye, General Manager of the American Woolen Company farms, reports that they are seeding sixty acres to sweet clover for pasturing.

Archer Pierce, Manager of the Brooksby Farm, Peabody, is planning to set out another block of fruit trees, mostly to MacIntosh and the new "Mac" varieties.

Seasonable Notes

The Vegetable Gardening Department will start your tomato, pepper, or any other seeds in flats for 25 cents per flat, and bring the plants up to transplanting stage for the hot beds, as we did last year.

Those who gave us seed last year were satisfied with the plants furnished them. Why not let us start your's this year?

Poultrymen short of incubator and brooder fuel will get good results with one-third coke and two-thirds buckwheat anthracite.

It is not too late to enroll in the correspondence courses on agriculture and homemaking, conducted by the Massachusetts Agricultural College. Write to your County Agent, at the Essex Agricultural School, Hathorne.

FEED DAIRY COWS LIBERALLY ON ROUGHAGE FOR ECONOMICAL MILK PRODUCTION

Should the 16334 dairy cows in Essex County get all the good roughage they could economically eat, a saving of \$120,000 could easily be made on our grain bill. Instead of giving a cow one pound of feed to every three of milk, it would be possible to feed one pound of grain to five of milk. This means an actual saving of over \$7.00 per cow.

Where a dairyman is short of good roughage and can give only a light feeding, say twenty-five pounds of silage and ten pounds of hay daily, to a thousand pound cow, giving thirty pounds of milk, it would be necessary to feed ten pounds of grain. The quality of the grain could be reduced from a 24% protein to a 16%, provided alfalfa or clover hay were fed.

Where liberal roughage can be fed, say forty pounds silage and fifteen pounds hay or twenty-four pounds hay and three pounds beet pulp, one pound of grain to every five pounds of milk is sufficient. For a cow weighing one thousand pounds, giving thirty pounds of milk daily, this would mean but six pounds of grain. Here again we can cut down on the protein content of the grain if clover or alfalfa hay were fed.

It is not always possible to raise the price of milk but every dairyman has it in his own power to cut the cost of production which is sounder than an increased price.

NEW POULTRY CLUBS

New poultry clubs are going at the Bailey School, Andover, the Bradley School, Andover, the Collins School, Gloucester and the Lynnfield School.

COUNTY CLUB AGENT

4-H LEADERS VISIT AGGIE

Many Brave Storm to Attend Conference

The 4-H Club Leaders' Conference held at Hathorne on January 9th was well worth while. In spite of the precarious traveling due to Saturday's blizzard, leaders took their chances on reaching their destination and returning safely in order to learn how to better serve their clubs.

Director Smith of the Essex County Agricultural School welcomed the visiting leaders and expressed the appreciation of the school officials for the excellent work accomplished by the 4-H Club leaders. County Club Agent DeQuoy outlined the aims and possibilities of the conference. Stress was laid on the necessity of maintaining the interest of the Club members in order to successfully keep the different groups up to standard. The attention of the leaders was called to the new policy of carrying on club work in Essex County which means that a local leader must be found in towns desiring club work for agricultural clubs as well as girls' clubs. The County Club Agent has had to spend too much time on detail work in handling the various agricultural clubs and this has taken time which should be devoted to organization and general supervision of the clubs.

Miss Harriet Woodward, who has charge of the girls' 4-H clubs throughout Massachusetts spoke encouragingly to the leaders and described the points which make for success in 4-H leadership. After several reels of interesting moving pictures shown by Instructor Denman, the leaders listened to an inspiring talk by State Club Leader George L. Farley.

Mr. Farley believes in 4-H Club work and has faith in young people. He related stories of Club members who had caught the spirit of service at Club camps and gone back to their home towns to carry Club work to other young people. Mr. Farley's talk was followed by a 4-H Club play presented by several girls from the Beverly Health Center clubs. After lunch, which was prepared and served by Ruth Erickson and Marjorie Hawkes of the Essex Aggie Home-making Department, the sectional meetings were held.

The Clothing Club listened to an informal talk by Miss Woodward, while Miss May E. Foley, State Nutrition Specialist, addressed the Food Club.

The leaders present were as follows, Mary Kachadorian and Elizabeth Shea of Methuen, Dorothy MacWilliams and Lois Vance of New-

buryport, Mrs. Huwyler of Newbury, Mrs. Walter Briggs and Miss Ida Eaton of W. Newbury, Mrs. Leon Jordan of Groveland, Mrs. Edward Tucker of Georgetown, Miss Doris Smith of Topsfield, Miss Mary Nourse of Ipswich, Miss Marion Parker and Miss Helen Wales of Beverly. Visitors included Hazel Fowler of West Newbury, Edward Tucker of Georgetown, Eleanor Smith, Frances Carleton, Esther Bunk, Helen Burke and Evelyn Gaudreau of Beverly.

4-H LEADERS THE RURAL WORKERS

Generous Voluntary Work Makes Club Work Possible

What is a club without a leader? A helpless, hopeless proposition! What is a local leader? Why, one of those generous, willing souls who want to lend a hand in helping boys and girls.

Did you know that:

Miss Davis at the Valley School, Nahant, has about forty girls enrolled in 4-H Food Club work?

Miss Gaffney at Gloucester High has two Room Beautiful, 4-H Clubs?

Miss Rundquist at Gloucester High leads two 4-H Supper Clubs with about fifty members?

Constance Ireland, a 4-H Club girl herself, is for the second year leading a 4-H Club of younger girls in food work?

Miss Thompson, teacher at Rowley Central School, has two good 4-H Clothing Clubs, this being her third year as a leader?

Miss Smith at the Marsh School, Methuen, has entered upon her fourth year of leadership. She now has a large club but finds the work easily handled, thanks to her foresight in training Elizabeth Shea and Mary Kachadorian as leaders. These girls help in handling the club, having done the same work last year. Mary will be remembered as County Clothing Champion last year.

Elizabeth Sullivan has fifty club members at North Andover. Elizabeth is a high school student and was County Clothing Champion in 1924.

The list could continue but lack of space limits the instances that can be mentioned. Every leader is putting a great deal of personal time and effort into a cause that bears good fruit.

4-H CLOVER LEAVES

Mrs. Dorothy Longely, who was formerly Miss Dorothy Smith, was one of our Club girls who proved her interest in 4-H Club work by leading a club last season. She is still continu-

STATE LEADER COMES TO ESSEX COUNTY

George L. Farley Addresses Rotarians, Holden High and Essex Aggie

January 11th was a busy day for Mr. Farley. He came to Essex County to attend the Club Leaders' Conference on Saturday the 9th. Director Smith took advantage of his visit by inviting him to remain over Monday and talk club work to the Danvers Rotary Club, Holden High school and the Essex Aggie student body.

His talks were equally enthusiastic and sincere. Mr. Farley is no speech maker. He merely talks. But he thoroughly believes everything he says. He believes in 4-H Club work and his talks make other people see club work as he does. His plea to the Rotarians for assistance to worthy club members who desire a further education created some real interest.

At Essex Aggie his aim was to interest the student body in passing on some of the information they were receiving from the School to the young people about the county. There is as a result a considerable interest among the students in becoming local leaders.

MANY NEW CLOTHING CLUBS

Rockport, West Boxford, Newbury and Lynnfield Now in the Swim

Welcome four new towns to the Clothing Club circle folks! Rockport, West Boxford, Newbury and Lynnfield are having their first clubs. Miss Churchill, one of the Broadway School teachers, has made the girls there happy by offering to lead their club. Down in Newbury, Mrs. Huwyler is leading the girls. Mrs. Avis Lundstrom is the Lynnfield leader. The West Boxford club is led by Miss McGinnis, a teacher at the school.

Other communities having clothing clubs follow: Salisbury 1, Newburyport 1, Byfield 1, Georgetown 2, Groveland 1, Merrimac 1, Rowley 3, West Newbury 2, West Boxford 1, North Andover 3, Andover 3, Topsfield 1, Methuen 2, Ipswich 1 and Beverly 7.

This looks like a banner year for Essex County Clothing Clubs.

ing her club work in addition to managing a home.

State Poultry Leader Nodine recently showed some interesting club slides to clubs at Haverhill, Andover, Wenham, Newburyport and West Newbury.

MANY PRIZES TO STUDENTS AWARDED in 1925

Most of the readers of this paper are familiar with the Bauer prizes, awarded annually to the students of the Agricultural and Homemaking Departments who make the most notable use, on project, of the training gained during the previous school year. These prizes are given annually by Mr. R. S. Bauer, President of the Board of Trustees, and Mrs. Bauer.

This year, too, the Governor John Endecot prizes were awarded for the first time to those students who made the greatest development on project along horticultural lines. These prizes total \$50 and are given by Wm. C. Endicott in honor of the famous colonial governor.

Another new prize is the Alumni Prize for the greatest development in academic work during the previous school year, awarded to both agricultural and Homemaking students.

The awards for 1925:

Bauer Prizes—Agriculture

First, Horace Shute, West Newbury, \$20; second, Bernard Sargent, Merrimac, \$10; third, Theodore McNichol, West Peabody, \$10; fourth, Henry Smith, Manchester, \$5; fifth, Henry Ellis, Merrimac, \$5.

Gov. John Endecot Prizes— Horticulture

First, Ardavast Kochakian, Haverhill, \$25; second, Joseph Parisi, Gloucester, \$10; third, Wallace Rennie, Andover, \$10; fourth, Horace Shute, West Newbury, \$5.

The Alumni Association Prize— Agricultural Dept.

Spencer Hunnewell, Saugus, \$5.

Horace Shute was awarded the Bauer first prize for a very fine summer's work in vegetable gardening and poultry. Under very difficult circumstances he raised three acres of vegetables, raised several hundred chickens to maturity and along with these, handled a large amount of general farm work. His work with his fruit trees won him recognition from the Endecot prize committee as well.

Ardavast Kochakian was employed on the farm of Mr. R. N. C. Barnes, Andover. "Twin Cedars." The work here follows fruit, poultry and market gardening lines. Kochakian's work was largely on the fruit and he practically took charge of the spraying and other major operations in this branch of the farm work. Besides this, he was of material assistance to his father, from time to time, in developing "the home business," setting up a greenhouse, starting flowers and other important floricultural operations.

Space does not permit description of the work of other winners, but it may be said that in every respect, their work measured up to that of the winners of other years.

Bauer Prizes—Homemaking Dept.

First, Jean Blake, Gloucester, \$20; second, Gertrude A. Smith, Methuen, \$10; third, Evelyn Scobey, Danvers, \$10; fourth, Phyllis Greenleaf, Lynn, \$5; fifth, Geraldine Boardman, Danvers, \$5; honorable mention, Thelma Sewell, Lynn.

The Alumni Association Prize Stella Burbine, Beverly, \$5.

The Gertrude MacCormick Prize

First, Sarah Burnham, Essex, \$10; second, Rae Reid, Georgetown, \$5.

The first Bauer prize was awarded to Jean Blake, H. S. S., who made a fine record during the summer as assistant to the dietitian at the Essex Sanatorium, Middleton.

Gertrude Smith of Methuen, a senior, won the second prize because of her excellent work in the family of James Sullivan of Methuen. She did the cooking, and general housework in a family of eight, to the great satisfaction of her employers.

Evelyn Scobey spent her summer at her own home, assisting in all of the work, cooking, sewing and housework. Her neatness and thrift in remodeling clothing was the marked characteristic of her project.

Phyllis Greenleaf, winner of the fourth prize, did most of the cooking and housework, and helped with the roadside booth in the home of Mrs. Turner on Main street, Andover.

The fifth prize was taken by Geraldine Boardman, who assisted at the State Hospital during July and August.

Thelma Sewell's project received honorable mention. She did much of the housekeeping for the family and relieved her mother of the planning and care, and labor of the work of the home.

The Alumni Association Prize for the girl student who made the greatest improvement in English during the course was won by Stella Burbine of Beverly.

Miss Burbine is now attending High School at West Palm Beach, Florida.

The Gertrude MacCormack prizes for the girl student who had the best house-planning project, were won as follows: First, Sarah Burnham of Essex, who papered, painted and furnished a sleeping room in a small house which had been entirely rebuilt.

Second, Rae Reid of Georgetown, who renovated her own bedroom. She papered, painted, made new hangings and pillows, and changed the whole appearance of the room.

HONOR ROLL AGRICULTURAL DEPARTMENT

First Term 20-21 Credits

Francis Eldridge	Georgetown
Peter Pasukonis	Rowley

19-20 Credits

Andrew Baillie	Andover
Henry Buhle	Danvers
Henry Ellis	Merrimac
Stanley Emerson	Rowley
Joseph Finocchio	Danvers
Thomas Gould	Lynn
Nathan Hale	Rowley
Paul Isley	Georgetown
Ardavast Kochakian	Haverhill
Stanley Luce	Haverhill
Roscoe MacKenna	Lynn
Ira Mitchell	Haverhill
Michael Muniak	Lawrence
Lionel Robator	Haverhill
William Wilson	Methuen

18-19 Credits

Philip Armitage	Lynn
John Baillie	Andover
William Brown	Marblehead
Erwin Dodge	Hathorne
Richard Gould	Merrimac
Maynard Haley	Rowley
Gordon Hamn	Rowley
Palmer Perley	Rowley
Aaron Porter	Beverly
Wallace Rennie	Andover
Walter Richardson	Salem
Robert Sproull	Byfield
Clarence Tibbetts	Amesbury
Malcolm Wood	Beverly

ROWLEY WINS CLUB HONORS

Arthur Gordon Pioneer 4-II Champion
of Rowley

Six years of steady work in the Garden Club and then success. Every garden a good one, but never quite the best until his record of perseverance and a splendid 1925 garden made him the top man in Essex County Garden Club work.

Corn is Arthur's specialty and he has a habit of getting his crop into the market before the price goes to pieces. This meant profit. He also had a great deal of other farm work to do.

Next summer we will hear about his prize trip to the Massachusetts Agricultural College at Amherst with our other County Champions. Arthur has since entered Essex Aggie, a logical step for a boy so interested in farming.

HOMEMAKING DEPARTMENT

TRAINED HOMEMAKERS

Our Country's Greatest Asset

"My daughter isn't happy in High School, so I came up here to see what you have to offer. She loves to cook and sew. She made the dress she has on."

Several mothers have made the above remark and many more would say the same thing but for two reasons: First, that there are still some people in Essex County who do not know of the Homemaking Department of the Essex County Agricultural School, and second, because of a prejudice for the type of work. Both these reasons are being rapidly overcome. The School is being advertised by its successful alumnae, and people are slowly coming to realize in the whole country as well as in Essex County, that a woman should be trained for her life work as well as a man. A man has always spent some time in learning his trade or profession, but a woman, who makes the home, the most sacred of human institutions, has had practically no training and has been expected to "carry on" with only her own good sense to aid her. That she has had a strong sense of her responsibility every one must grant. Our foremothers have received but little public glory, but the home life has always been acknowledged as the foundation of civilization and development. Why, then, should not these faithful women be given all the help possible to aid them in their work of homemaking and child rearing.

The time has passed when girls are taught to ignore the fact that they will some day be wives and mothers, and some of them at least are being taught the best methods of making this work a success.

Each girl who graduates from the Homemaking Department is able to prepare and serve meals of properly selected and nourishing food. She can make clothing and hats of all kinds. Her home nursing course has taught her how to care for sickness in the home, accidents, how to take temperatures, and how to feed a patient.

She knows how to plan her own home, furnish it, and take care of it. She can wash and iron, and keep her family budget. Nor have her cultural studies been neglected, for she has had, during her course, English, U. S. History, Geography, and other academic subjects.

Best of all, she has been given many opportunities to take responsibility and has been taught that life is not play, but that a woman's contributions to the successful and happy home

must be as great, at least, as a man's.

Why, then, should there be prejudice for this type of education. Why, because a girl does not care for High School subjects, should she be denied a higher education?

There is much to learn and a long way to go before our home life reaches perfection. Let us give our girls all the education in Homemaking that it is possible for them to have, and in that way, help our country to stand first among the nations of the world.

A HOMEMAKING SENTIMENT

The critics are saying that girls of today,

Are not in their grandmother's class,

With all due respect to the youth of those days,

We are willing that statement should pass.

We do not desire to be clothed as they were,

Nor eat what to them was a treat,

We prefer modern clothing, with comfort and style,

And foods that we're taught we should eat.

But we want to be homemakers just as they did,

We aspire to be grandmothers, too.

So we're studying hard to learn how to make homes,

That are better than grandfather knew.

HOMEMAKING NOTES

Many of the Senior and Junior girls in the Homemaking Department are making silk evening gowns to be worn at the coming school festivities, the Senior Dance and the Junior Prom. The gowns are very attractive and represent a great deal of careful work on the part of the students. They are using the new flare skirt, bound around the bottom with neck and sleeves bound to match; beading, embroidery and flowers are all done by the students themselves.

The Senior and High School Special classes are very much interested in the Home Nursing course which is being given by Mrs. Balfour, a Red Cross nurse and instructor.

Work on the new Homemaking building is progressing rapidly, and by next September the girl students will probably be housed in a new up-to-date building, built and equipped for the development of the very latest

NUTRITION

Vegetables as Necessary in Winter as in Summer

At this time of year, menu planning is one of the hardest problems of the housekeeper.

To be sure that the diet is properly balanced, and that the division of the budget devoted to foods is not increased, gives plenty of opportunity for study and ingenuity on the part of the home maker.

Vegetables are just as necessary during the winter months as in the summer, and the family must have at least two servings each day in order to keep the body in proper condition. One underground vegetable, such as carrots, turnips, or onions, and one over-ground, as tomato, cabbage, or spinach, will prevent the need for the spring tonic which so many people find necessary each year.

If the members of the family do not "like" vegetables, they should be educated to eat them. A few people cannot eat certain foods, but that condition exists very rarely. The least said about "liking" or "disliking," the better. In most cases, the dislike is caused by prejudice, and education in foods is the surest way to overcome prejudice.

Serve as many vegetables as possible in the raw state. Raw cabbage is more easily digested and nutritious than cooked, since many of the vitamins and minerals are lost in the water which is discarded.

Raw vegetables can be served attractively in salad combinations. The following recipe has been used successfully in the School lunch room:

Health Salad

- 1 cup raw cabbage finely chopped
- 1 cup apple finely chopped
- 1 cup grated carrot (using finest knife on food chopper)
- 1 cup grated pineapple
- 1 cup celery (when in season)

These ingredients are mixed together and moistened with cooked salad dressing or mayonnaise dressing and served in mounds on lettuce and garnished with salad dressing.

Ideas in Household Arts.

The Homemaking Department has served three dinners this year to a large group of visitors. On Oct. 8th to the Lawrence Kiwanis Club, and on Nov. 4th the Met Kiwanis Clubs of Essex County met at the school and were served a dinner cooked by the students. On January 3rd, the Trustees and combined Advisory Boards were invited to spend the day at the School and the students prepared for them an attractive, well served meal.

ESSEX FARMER AND HOME MAKER

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Vol. 7

HATHORNE, MASS., MAY 1926.

No. 2

BETTER HOMES DAY

Program of Speakers and Exhibits
Emphasizing Health in the Home

All Essex County homemakers are invited to attend the third Better Homes Day on Wednesday, June 2, at the Agricultural School.

We are planning a fine program with exhibits and want you with us. This year Better Health will be our keynote.

We have been fortunate in securing Dr. Caroline Hedger of Chicago as our speaker. Few women can speak from such a wide experience with children as can Dr. Hedger.

As the aim of the Extension Department is to help the homemaker with her everyday problems in food, clothing, and management of the home, we have planned our exhibits with this aim in view.

A Home Welfare exhibit will be given by a group of Essex County nurses, while a group of home makers from Hamilton and Wenham are planning an exhibit illustrating "Health in housework." Food and its relation to health will be shown. A group of Danvers homemakers, who have been members of a nutrition class under the Extension Department, will give a playlet "Food for Thought."

There will also be an exhibit of work accomplished in the Extension classes in dressmaking and millinery.

Bring a basket lunch and enjoy the day with other homemakers.

Dr. Caroline Hedger, physician at the Elizabeth McCormick Memorial of Chicago, an institution having for its aim the improvement of child health, is to be the speaker on June 2.

Doctor Hedger understands young people in an unusual way. This is an opportunity for parents who are training future citizens to receive a fund of common sense information. Her subject will be, "Adolescence."

When Doctor Hedger spoke on this subject last summer at Farm and Home Week at Massachusetts Agricultural College, boys and girls, men and women attended in such numbers that it was necessary to adjourn the meeting to the college campus.

Doctor Hedger speaks in nine of Massachusetts' counties during the month of June.

National 4-H Club Slogan—"To Make the Best Better."



Local Leaders in Children's Clothes Project at Groveland Receiving Instruction in Use of Machine Attachments.

PARENTS' DAY AT HOMEMAKING DEPARTMENT, FRIDAY, JUNE 18th

The Annual Parents' Day at the Homemaking Department will be held on Friday, June 18th. All friends of the School are cordially invited to be present and spend the day with the instructors and students. An interesting program showing the work will be given and there will be an address to the students and guests. Nature, we hope, will be at her best, and her best is certainly beautiful at the Agricultural School in Hathorne.

Come, bring your lunch, and spend the day in the country, as guests of the Homemaking Department of the Essex County Agricultural School.

HOMEMAKING DEPARTMENT

The last term of the year in the Homemaking Department has opened with an enthusiastic group of girls eager to make the most of the time left to them. The Seniors are beginning their graduation dresses, and the rest of the girls will make themselves attractive summer clothing. The work in sewing is always seasonal and the class rooms present a riot of color in both the sewing and millinery divisions.

Several of the instructors have been giving talks on different organizations on the various subjects taught in the school. Miss Ruth Erickson has spoken several times on Foods; Mrs. Alice Gerard and Mrs. Abbie Clapp on Clothing, and Mrs. Ella S. Morrill, Educational Manager, has told of the general work and ideals of the School.

WOMEN'S ADVISORY COUNCIL AND TOWN LEADERS

The Advisory Council of the Women's section of the County Extension Service, together with the town leaders, held their annual meeting at the School recently. The purpose of the meeting was to acquaint the members of the Council with the type of work and the new projects now being carried on by the local leaders under the direction of the Extension Service. Mrs. John A. Andrew of West Boxford spoke on "What Extension Service Means to the Rural Woman." Mrs. David B. Claxton of Ipswich spoke on "What Extension Service Means to the Girl in Industry." Mrs. Chester Hallock of South Groveland and Mrs. Walter Eaton of Haverhill explained the new project in Children's Clothes. Nutrition projects were explained by Mrs. John Everett of North Andover, Mrs. Harry Morse of Peabody, Mrs. Harold Mostrom of Danvers and Mrs. Charles Turner of Beverly.

After luncheon, which was prepared and served by the Homemaking Department of the School, Miss Lucile W. Reynolds, State Home Demonstration Leader, and Miss Caroline E. Nourse of the State Department of Education, gave instructive talks on Extension Work as it is being conducted in this State.

Close to 92,000 forest fires swept 29 million acres of land and caused a money loss of 38 million dollars in the United States last year, the U. S. Forest Service reports.

Essex Farmer and Home Maker HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

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CALENDAR

- June 2 Better Homes Day at School.
June 15 Field Day and Outing (afternoon and evening). Boston Market Gardeners' Association.
June 18 Parents Day, Homemaking Department.
June 25 Homemaking Department school year ends.
July 27 30th Farmers' Week at Mass. Agricultural College, Amherst.
Aug. 2. Field Day Essex County Fruit Growers with Mass. Fruit Growers Association.
Aug. 4 Combined Pomona Field Meeting at School. Essex and Chebacco Pomona's Co-operating.
Aug. 3-6 Conference Agricultural Teachers of Mass. at M. A. C., Amherst.
Aug. Junior Club Picnic at School.
Sept. 7 Agricultural Department (for first year students) and Homemaking Department opens.

EDITORIAL

Salem News, May 11th

During recent years the great majority of young people raised in the country districts of New England, have been lured away from those places by the good wages paid in the manufacturing plants of this section. This chance to obtain in a few years a fairly high rate of pay, is perhaps the greatest obstacle to the development of the farm land of this section.

But these young people should con-

sider that their expenses will be very much more in a manufacturing city than they would be at home in a country town, and that when they work for an industrial concern they are working to build up a property for someone else, but when they start in farming, they are building up a property for themselves.

Many of these young folks are discouraged about farming because they have always seen it done in an old fashioned way. Probably the great majority of those who make a success of farming in Massachusetts from now on, will make a specialty of some one line of products and develop that to a high point of efficiency and the business run on that line will seem more attractive. Recent statistics show an increase in the number of farms operated in Massachusetts and the increase seems to be principally among those who go into enterprises like truck farming or poultry raising where some specialty is worked up.

In this thickly populated region there is going to be plenty of market for vegetables, poultry, dairy products, etc., and that demand will keep on just the same even when the factories are running slack. Farming and gardening operated by modern technical methods will be a different proposition from the old fashioned kind. But young people who expect to make a success of it need to study it in some agricultural school or college.

APRIL NOTES FROM THE SCHOOL WEATHER STATION

Maximum Temperature 76° F on 22nd
Minimum Temperature 18° F on 12th
Average Daily Temperature 41.2°
Normal for month 46.4°
Precipitation 1.98 inches (Normal 3.55 inches.)
Total hours Sunshine for month, 245 approximately.
Total possible hours Sunshine for month, 401 hours.

The spring has been notable for its cold weather and dryness. Up to May 15th the rainfall for the year was about 4 inches less than the normal for the first 4½ months. The only rains of much consequence since March 31st occurred on April 4th, 8th, and 25th, but the long drouth was effectively broken by the heavy rain which fell during the night of May 16th. A total fall of 1.34 inches was recorded at the School.

VALUES OF COUNTRY LIFE

Simplicity, genuineness, lack of artificiality; seriousness, reverence, sense of values; home sentiment, family life and conservatism.

HOMEMAKING DEPARTMENT COMPLETING YEAR'S WORK

The Homemaking Department is nearing the end of another year of successful work and still another class of girls will soon be ready to graduate, prepared to earn their own living in practical ways, until the time comes when they will be homemakers in their own home.

As nearly all women are eventually home makers, the training obtained in a school of this type is the most useful training that a girl can possibly get, in these days of specialization. Homes managed by trained home makers are the greatest assets of any state, and Essex County is doing its bit to push Massachusetts to the front rank in this respect.

In the Homemaking Department of the Agricultural School, the girls are taught all of the essentials in the art of homemaking. How to plan attractive grounds, sanitary and properly furnished homes; how to care for the house itself; and how to feed and clothe the family. The family budget with its many complications is a part of the training, and a course in Home Nursing teaches the care of the sick in the home. Nor are the cultural subjects neglected, for English, History, Citizenship, Geography and Arithmetic are given their proper place in program. The whole course is interesting, practical and productive of a better womanhood, and because of that, of a better County through its intelligent Home makers.

GIRLS' BASKETBALL

The Basketball season has closed and the following students have received the Athletic "E" for their efforts in this branch of athletics:

Arline Pilkington, Methuen, Coach.
Dorothy Ham, Lynn, Captain.
Evelyn Scobey, Danvers, Guard.
Frances Sullivan, Danvers, Guard.

Lillian Pizzello, Beverly, Side Center.
Marjorie Hawkes, Danvers, Manager.
Dorothea Burnham, Swamp., Forward
Alice DeCraney, Lynn, Forward.

The team has played six outside games and there has been several games between the different teams. The basketball season has been interesting and successful and much credit is due to the coach, Arline Pilkington of Methuen, a senior in the School.

The first year students are now being coached in tennis and much interest is shown. Every girl in the class is learning to play the game and it is hoped that later it will be possible to have a tennis tournament on the School campus.

"Some defeats are only installments of victory."—Jacob Riis.

BOYS' AND GIRLS' CLUB WORK



ROBERT B. EWING

NEW 4-H CLUB AGENT

Essex Aggie Graduate Appointed by
Director Smith

The position of Essex County 4-H Club Agent ably filled by Mr. Stanley DeQuoy for the last five years has now been taken over by another Essex Aggie graduate in the person of Robert Bruce Ewing of the Class of 1923. Mr. Ewing is fully qualified to take over the duties of this office and is bound to make many friends in this new work. He has a good personality and is a natural leader of young people.

Mr. Ewing was born in Haverhill but received his schooling in Lawrence graduating from the High school in 1919. After a year of study at Tilton Academy, "Bob", as he is called by his friends became interested in and decided to enter the Agricultural School at Hathorne. As he was one of a large family he determined to pay his own way. With this in mind he remained at the school during the entire course, working on the farm when not in the classroom. During the first summer he was student foreman at the market garden. The second year he worked on the school poultry plant doing his share in the raising of several thousand chicks besides taking care of a thousand hens. His senior project consisted of general fruit work at the Elm Tree Farm at Stowe, Mass. While there he obtained a good knowledge of commercial orchard practices. After graduation he worked for several months at the Osborne Farm in Middleton, leaving to operate the Winnetasker Farm in the same town.

After reading the above it would seem that Ewing is all farm and nothing else, but such is far from the truth. He is keenly interested in all forms of athletics. While at Aggie he played both football and basketball, being captain of the latter team in his senior year. He was president of his class for two successive years and held many other offices indicating his popularity among the students. Since leaving school he has interested himself in the Boy Scouts and is now Scout Master of Troop 1 in Middleton. "Bob" Ewing is just the kind of a fellow to lead the 4-H Club of Essex County. Just to prove this, we observe that he has already placed the 4-H Club pledge, neatly framed, on his desk as a constant reminder of the new work he is undertaking. We wish him well.



I Pledge

My HEAD to clearer thinking
My HEART to greater loyalty
My HEALTH to better living
My HANDS to larger service

FOR

My Club
My Community
My Country

Every leader and 4-H Club Member
should know—

- 1—Meaning of the 4 H's.
- 2—4-H Club Pledge.
- 3—National 4-H Club Slogan.
- 4—Massachusetts State Club Song.
- 5—Four Leaf Clover Song.

BENJ. F. OGDEN OF MIDDLETON WINS STATE CHAMPIONSHIP IN SMALL FRUIT

Benjamin F., son of George B. Ogdens of Middleton, has been declared state champion in small fruit growing and as a reward for his efforts in 4-H Club work will spend a week at Camp Gilbert, Amherst, Mass., for the second time in three years. Benjamin has an enviable record in club work, having been a member of garden and fruit clubs for the past five years.

In 1922, his vegetable garden was judged the best club garden in Essex County. This honor won for him his first trip to Amherst, the expense being shared by both the State and County. Since that time, Benjamin has developed a worthwhile project in strawberry raising. Last year his strawberry bed of less than one-quarter acre, yielded over 1000 quarts which were sold at 25 cents per quart. The young man kept records of his expense and at the close of the season, the net return was well over \$150. His profit would have been much greater than this if he had not been obliged to hire all the picking done for him.

The following incident will explain. One June 13th, Benjamin was riding with his father when their auto was hit by another. The young man received severe injuries to his arms and legs which prevented him from taking any part in harvesting his crop. He did, however, stay on the job to supervise his pickers and superintend the marketing of the berries. In all probability, his determination to carry on even after his unfortunate accident weighed heavily with the judges.

Benjamin's garden and strawberry growing projects were carried out under the direct supervision and guidance of the Extension Service of the Essex County Agricultural School. The achievement of this young man, not yet sixteen years of age, illustrates the value of this type of service to the boys and girls of Essex County.

A word of explanation is due to tell what the reward will be. Benjamin has the privilege of spending a week at Camp Gilbert, at the Massachusetts Agricultural College in Amherst with all expenses paid. There are several other Club Champions in Essex County who will likewise spend a week at the College with the new County Club Agent, Robert B. Ewing, during the last week in July.

COUNTY AGRICULTURAL AGENT

THINNING FRUIT IS ADVISABLE Particularly True of Certain Varieties

Thinning fruit has long since left the experimental stage and has now become a standard orchard practice, where ever a high quality fruit is produced.

The theory behind thinning has its parallel in many other branches of agriculture. The gardener thins his carrots and beets; the forester his pine, all to give the remaining plants more room to develop choicer products.

The advisability of thinning varies with varieties and vigor of the trees. Wealthy, Wagener, MacIntosh and Delicious are especially responsive to thinning. Peaches, due to their tendency toward heavy bearing, produce larger and better colored fruit, if thinned to five or six inches apart.

When a tree is over-laden with fruit, the total yield is reduced only slightly, even though half of the small green apples are thinned out. Simply because each remaining apple attains a much larger size.

This thinning should take place after the usual June drop. Pick off all imperfect apples and leave no more than one to a spur, being careful not to injure these spurs, since on them are borne many successive crops. Some growers leave only apples that hang downward, it being their contention that unless an apple does this, it will eventually drop off, as its weight increases. Methods of thinning vary. Some growers use only thumb and forefinger, pinching off the stem. Others use a special type of shears:

No definite rules can be laid down as to the proper distance to thin. Apples should be from five to eight inches apart. Some authorities say, thin to three times the diameter of the largest fruits at maturity. The smaller the fruit, the heavier it should be thinned, and the opposite is also true, except as it may cause breaking down of limbs.

Will it pay the fruit grower to thin? This is the one question on which the practice must stand or fall. We know it gives larger, better colored apples. Professor Gourley, when at the New Hampshire Station, found that thinning averaged to increase the number one apples to 72 per cent while on the unthinned, he got only 32 per cent of number ones. A grower in the middle western part of the state reported that it paid him \$2.00 an hour to thin his MacIntosh last year.

Why not pick out a few heavy laden trees this year and try it out. Keep an accurate record of the time taken

AGRICULTURAL ENGINEERING More People Are Learning What This Service is

Village and city residents, as well as farmers and students on their projects, are taking advantage of the assistance which the School is offering them in solving their agricultural engineering problems.

An idea of the variety of the problems under this head which are being taken care of may be gained from a glance at the past month's list which includes one or more cases of each of the following: Water supply, sewage disposal, farm boundary, orchard layout, drainage, cistern purification, vegetable and fruit storage, barn ventilation, irrigation, and poultry house construction.

Many needs are brought to light by the various project instructors on their regular work of visiting the boys on their projects in different parts of the county. Of course the Director and those on extension work throughout the year, namely, the County Agent, the Home Demonstration Agent and the 4-H Club Leader find many cases also.

Any resident of the county having an agricultural engineering problem on which advice is desired should write the School stating the nature of the problem. Unless it is something which can be taken care of satisfactorily by letter, the agricultural engineer will call. It may be convenient to use the coupon below:

CONSULTATION COUPON

Essex County Agricultural School,
Hathorne, Mass.

Attention of the Agricultural Engineer.
Gentlemen:

My problem is

Will you please give me advice on
this matter without cost to me?

Signed

Address

to thin each tree and check up on the increase in quality. Only be sure to thin heavy enough. Let your County Agent know the results you get.

HOW TO CUT THE LABOR COST OF GROWING SILAGE CORN

By PROFESSOR J. B. ABBOTT

1. Do not make a practice of growing much silage corn on land where tillage is necessarily expensive. The crop is not worth money enough to warrant it. Use that sort of land for hay or for some crop that will pay for intensive methods.

2. Lighten the "peak load" of spring work and get ready to plant earlier by:

- Doing as much fall plowing as possible.
- Hauling and spreading as much manure as possible during the winter.

3. Germinate and kill several successive crops of weeds before planting by stringing out the several operations of seed bed preparation (disking, harrowing, etc.) from as early as the land can be worked until planting time.

4. Soon after planting, which leaves the seed bed somewhat uneven, but before the corn comes up and while the soil is dry, go over the field with a roller, cultipacker or plank drag to kill another crop of weeds, crush clods, fill the planter furrow and firm the soil, which leaves the seed bed level and smooth.

5. As soon as more weeds begin to show, usually about the time the corn comes up, go over the field with the spike tooth harrow set to work light. The corn at this and subsequent harrowings, is so large and well anchored in the soil, as compared with the weeds, that you can kill the weeds without hurting the corn.

6. Repeat 5 as needed till the corn is 6 to 8 inches tall, preferably doing the work in the afternoon when the corn is not quite so brittle as it is in early morning.

7. Then go to haying. Ripe corn is good. Ripe hay is not.

IMPORTANT

The two critical points where beginners usually fall down are:

1. The seed bed must be smoothed and firmed before the corn comes up, otherwise it cannot be harrowed without covering up, pulling up and otherwise damaging a good deal of corn.

2. Weeds must never be allowed to get much start as the very basis of the method is that the harrow will upset and kill small plants but will not injure larger ones.

ALFALFA FOR ESSEX COUNTY

How to Grow It Successfully

Alfalfa is a profitable hay crop for Essex County, provided certain definite requirements are met. We must properly select and prepare the seed bed; liberally supply it with lime and acid phosphate and sow only northern-grown seed, well inoculated. Unless we are prepared to meet these requirements, we are assured of nothing but failure.

SELECTING THE FIELD

Select only a fertile, well-drained field, not too weedy and with an open subsoil. Always take a field which has previously been in potatoes, corn, truck crops, or small grain. A light soil is not essential, but alfalfa will do better on it than any grass.

PREPARING THE SEED BED

Alfalfa requires a firm, mellow seed bed. Fall plow if possible, otherwise as early in the spring as feasible. Harrow three or four times at weekly intervals in the spring to fit the seed bed and kill weeds.

Apply as much lime as the test shows is necessary. It is a good plan to put half on top and plow it in, then disc the remainder thoroughly into the top soil after plowing. This limes both sides of the land. Where all the lime is applied after plowing, disc it in thoroughly. Applying the lime to the crop preceeding alfalfa is ideal.

Alfalfa needs fertilizer. Disc in twelve to fifteen loads of manure and six hundred pounds acid phosphate per acre. The phosphate may be spread with the manure by scattering fifty pounds on each spreader load. On light soil, two hundred pounds per acre of muriate of potash has been found profitable.

SEEDING

Genuine northern-grown seed is necessary. Grimm or Ontario Variegated is best. It is our advice not to try common alfalfa seed if this is a first attempt with the crop. Winter killing of this variety may cause discouragement. Sow fifteen pounds of seed per acre.

Inoculation is just as vital as the seed. A good commercial culture, used as directions on the container call for, assures success. Free inoculation for a bushel of seed can be obtained through your County Agent. Sow the inoculated seed late in the day or when cloudy. Harrow in lightly with a peg-tooth harrow or weeder. Then roll the field or use a plank drag. Some growers supplement their inoculation by broadcasting and harrowing in a load of surface soil from an old alfalfa field.

Sow alfalfa as early as oats, provided the land is not too weedy; in this case harrow some more at weekly intervals and still sow early. If



A Two-Row Corn Planter in Action.

a nurse crop must be used, sow lightly and cut early. A bushel of oats or beardless barley is sufficient. Alfalfa seeded early can usually be cut once the first year, about August, when in full bloom, if the land is moist and the weather not too hot and dry. In a favorable summer, alfalfa can be sown in August, but dry weather has hindered much, the last few years.

If this is a first attempt at alfalfa and it is not an entire success, stick to it and try again on the same field, thus taking advantage of the previous preparation.

Alfalfa hay with good corn silage will enable the dairyman to cut his grain bill 30 %. Better still, a properly started field will produce profitable crops for seven to ten years.

LET YOUR COUNTY AGENT AT THE ESSEX COUNTY AGRICULTURAL SCHOOL ASSIST YOU IN GETTING BETTER ALFALFA, CLOVER and other hay crops. They Reduce the Grain Bill.

AROUND THE COUNTY

E. B. Roy of Amesbury has about as nice an alfalfa field as anyone would care to see. He is also rebuilding his dairy barn.

Elmer Demeritt of Merrimac was assisted by the County Agent and Mr. Denman in laying out his apple orchard site. He also has several hundred peach trees and 800 chickens—all doing well.

J. R. Merrill of West Newbury reports that common alfalfa has winter killed quite severely. He intends to plant only the Grimm variety from now on.

M. A. Astman of North Beverly is planting two and one-half acres of alfalfa this spring. He is making sure of a good stand by using plenty of lime and 500 pounds of acid phosphate per acre.

Over seventy dairymen in Essex County have requested the County Agent to assist them in growing alfalfa this year.

Dudley Sprague of Rowley has enrolled in the cheaper silage project and will try to grow corn with a minimum of hand labor. Twenty-seven other dairymen have also enrolled and will let the hoe get rusty.

Looks as if Apple Scab is due for a good trimming in Essex County this year. To date, 176 orchard men have enrolled in the Better Fruit Campaign and are being kept informed by the County Agent on the proper time to apply each spray.

Anyone who doubts that alfalfa will grow in Essex County had better drop in to see Mr. Forrest Rust of Topsfield and get a little of his enthusiasm. He now has about ten acres and is planting more. Mr. Rust says that when his alfalfa hay was gone and the herd fed only English hay, his daily production dropped three cans of milk, on the same grain.

ORNAMENTAL GARDENING COURSE AT GLOUCESTER— ADULT CLASSES PART OF SCHOOL PROGRAM

On January 12, 1926, a lecture course on the improvement and care of Home Grounds opened at the Gloucester Evening High School with a registration of twenty.

The course is designed as a series of winter lectures followed by summer projects which are to be supervised and assisted by circulars and new publicity, and is given by the State Department of Agricultural Education, Essex County Agricultural School and Evening Practical Art School at Gloucester.

Director Ralph P. Ireland, Director of the Evening Practical Art High School is Director of the course and C. S. Wright of Essex County Agricultural School is Supervisor of the projects.

The objective of the course is to encourage the beautification of home grounds and public grounds of Gloucester, and work toward making Gloucester more beautiful.

The first two lectures were given by Mr. Blundell of Olmstead Bros., Landscape Architects, Brookline, Mass.

Mr. Blundell began with the recently purchased lot, placed the home and perfected the picture through the use of lawn shrubs and trees.

Lantern slides were used to emphasize the use of groups of shrubs and to show how the individuals are used to make a harmonious and beautiful group.

The suggestion that best success comes from using native growing shrubs and trees met with approval.

Mr. Blundell furnished a supply of mimeographed sheets giving reference reading material, a list of trees and shrubs suitable for use telling how far they should be planted apart, height, width and how fast they will grow.

The third lecture was given by Mr. Salter, Instructor in Horticulture at the Norfolk County Agricultural School.

Mr. Salter's talk was a consideration of the growth of perennial flowering and decorative plants, soils and food they like, how much food they should have and when.

A good list of the suitable perennials was presented, time they should be planted, winter protection, and in general how best to care for them for best results.

Color scheme planting and planting for succession of cut flowers proved very interesting.

Mr. Wetterlow of Manchester, presented an interesting general consideration of the annuals in the fourth lecture and in the sixth lecture gave to the Rose, the queen of summer flowers, his entire attention.

Mr. Wetterlow is a man who knows plants, sees wonderful beauty in individuals and combinations from the plant world and is willing to impart his secrets learned through years of practical experience to those who are interested.

The fifth lecture was given over to a discussion of Window Gardening or the part the window box plays in joining the home with the lawn and street through the assistance of the flowering plants, shrubbery and trees to complete the picture beautiful.

The complete story of the window box from its making and painting to its plantings for beauty through the entire year was given by Mr. Wright, Instructor of Horticulture at the Essex County Agricultural School and Garden project supervisor for the Gloucester group.

The seventh meeting was given over to a consideration of the shade trees by Mr. Wright, especial attention being given to the care and preservation of our grand old trees and how to replace them for the generation to come.

The course finished with the eighth meeting by a talk by Director F. A. Smith of the Essex County Agricultural School on lawn grasses, lawn making and lawn care.

Points of interest were: Comparison of shortest grasses which never grow over one inch high through its relatives to the tropical bamboo which grows to enormous size.

Same preparation, form good root pasturage regardless of initial cost since it is a long time investment. Save top soil when building, grade properly and avoid concave surfaces which are water and ice holders, and grass killers.

Cut new lawn first time with scythe and be careful not to cut too late in fall to afford protection not later than September 15th. Use wood ashes and ground bone for top dressing of old lawns.

These lectures are being followed up by visits to the homes, to assist in carrying out the solution of problems as they arrive.

AGGIE DEFEATS JOHNSON

Essex Aggie defeated Johnson in a close meet Friday, May 14th by a score of 40 to 23. Essex Aggie took first place in every event except the mile run and captured several seconds and thirds. Moody of Johnson won the mile in very good time for the course and the Johnson Relay Team also won that event.

Walker of Essex put in a new school record in the shot put with a heave of 36 feet and 9 inches.

BARNs

Make Them Up-to-Date

The barn problem in this section of the United States will be found in most cases to be that of the rearrangement and repair of old barns.

Whether it is a case of building a new barn or making extensive alterations in an old one, an ideal design and arrangement should first be worked out. If it is to be a new barn, plans embodying these ideas can be drawn or secured. If it is a case of remodeling, these ideal plans cannot be followed completely but they will serve as a guide in helping to get as near to the ideal as possible.

Much of the difficulty in, and necessity for, the remodeling of barns is due to lack of careful planning by the farmers who built them a generation or more ago. They can well be pardoned for the problem was not well worked out then. Now barn planning is receiving careful and thorough attention in the Agricultural Engineering departments of most of the state colleges. Furthermore, there are companies which furnish complete plans for a very small sum of money. Many times a design can be found which, with minor changes, can be followed in building or remodeling.

Of course each farm requires a special design in one or more particulars. A barn which may fit the conditions on a certain farm perfectly, may not fit the conditions on any other farm in the world. A difference in any one of many factors, such as kind of site, type of farming, size of farm, etc., means a different barn.

Building a Modern Barn

First make sure you need a new one and cannot instead remodel and modernize existing buildings at less cost.

If building a complete new plant, house as much as possible in a single large structure rather than in two or more smaller ones. This will save in first cost and also in upkeep as well as in time in doing chores.

Run the long way north and south and place on a south or southeast exposure.

Have the site well drained. Extend foundation walls 1½ feet above highest ground around barn.

Place stables on a ground floor of concrete (actually under animals it may be plank or cork brick). Manure storage should be in a roofed manure pit some distance from barn.

Use plank frame construction and have open mow space so that modern hay unloading machinery may be used to advantage.

Consult with competent agricultural engineering authority for either remodeling or building new, to secure proper adaptation, type of construction, lighting and ventilation, and to keep the cost down. R. H. D.

SEASONABLE SUGGESTIONS

Station E. C. A. S. Broadcasting

Cucumbers, summer and winter squash may be planted about May 20th. When making up and planting hills of these three, do not let the seed come in direct contact with manure. It is wise to thoroughly spade the manure into each hill.

Tomatoes

It is time to plant where one will secure tomato plants. It is preferable to buy them direct from the grower. Gardeners are sometimes disappointed when they buy stocky looking plants of dwarf varieties. These dwarf varieties are poor yielders.

Bonny Best or John Baer are good early varieties and Stone is a standard late sort. If good plants of these varieties are set four feet apart each way and properly fertilized, they usually yield well. Set tomatoes and peppers about June 1st.

Corn

Don't make the mistake of making only one planting of corn, having it mature at one time and having to buy corn the remainder of the season.

Farmers make an early planting about April 25th and another planting May 10th. In order to get a longer supply of corn for table or market, further plantings on May 25th, June 10th and June 25th should be made. A quick growing variety like Bantam should be used for the last planting.

Potatoes

Good crops of potatoes for winter storing are often grown when the seed is not planted until between June 1st to 15th.

Asparagus

Many people have started beds of the new Washington asparagus within recent years. These beds should not be cut the second year after setting. The third year the cutting should be for three weeks only. Each year thereafter the cutting season may be extended. When the plantation is well established, cutting continues until the last week in June.

For the home gardener, short rows of early snap beans planted at 15 day intervals from May 15 to July 15 will give a continuous supply.

Lettuce

Lettuce is usually high priced and in brisk demand during the hot months. Home gardeners who wish a supply for salad purposes during August should begin now and make plantings a few feet in length at 10 day intervals until June 15. "All Seasons" is a good hot weather variety.

Irrigate

The most careful plans and the most thorough work in nursing along the vegetable garden can be set at naught by a drought.

Holding a garden hose requires much time and probably means a rather unsatisfactory job.

Excellent "automatic rainmakers" have been invented which gently sprinkle rectangular plots ranging in area from 1000 to 3000 sq. ft. and cost from \$30.00 to \$60.00.

A simple oscillating water motor swings the portable pipe line back and forth in an arc, it is connected up with the sillcock or other water pressure supply by a piece of garden hose.

The latest types of "rain makers" cover rectangular areas, allowing large spaces to be irrigated quickly without duplication. The new sprinklers are more efficient than the revolving type which water circular areas, causing overlapping and frequent changing.

The vegetable gardening department at the School has information regarding these portable "rainmakers" and will be glad to assist market gardeners who are interested.

POULTRY PROJECTS, SEASON OF 1926

Mr. Stimson, of the State Department of Education, has spent two days this week visiting poultry projects with Mr. Moore. He found some very interesting and complete projects. This year the School was very fortunate in placing a student with each one of the two real poultry breeders in this county where trap nesting and pedigree work is carried on faithfully. These two students are getting a fund of valuable information and experience while in the employ of these two men that will be of inestimable value to them in years to come.

The School also has seven or eight boys on the large commercial poultry plants in this county where the scope of work is so extensive that they get experience in every phase of poultry work.

Home poultry projects also show that the school is fortunate in having some students so situated that they can carry on a good sized poultry project at home, where the student himself is the boss and responsible for the entire operation of incubators, brooding, rearing and caring for laying stock.

The slogan of the poultry department for this season is:

"Clean chickens reared in clean houses and ranged on clean land, and housed in clean laying houses, at the close of the growing season."

If this policy is followed carefully at this time of year we feel sure that the profits derived from such a program will show up during the early fall and winter, in the form of a decreased mortality rate and an increased egg production. W. B. M.

HONOR ROLL

Agricultural Department

Third Term

20-21 Credits

Peter Pasukonis	Rowley
Joseph Finocchio	Danvers
William Wilson	Methuen
Paul Hsley	Georgetown
Thomas Gould	Lynn

19-20 Credits

Francis Eldridge	Georgetown
Ardavast Kochakian	Haverhill
A. Donald Vaughan	Lynn
George Ward	Saugus
Edwin Dodge	Hathorne
Richard Gould	Merrimac
Charles Marston	Georgetown
Warren Forrest	Topsfield
Nathan Hale	Rowley
Robert Mooers	Haverhill

18-19 Credits

Stuart Cogswell	Essex
Otis Evans	Middleton
George Rippon	Lynn
Arthur Wentworth	W. Peabody
Harry Lear	Lynn
Horace Shute	W. Newbury
Robert Sproull	Byfield
Clarence Tibbetts	Amesbury
Chester Cox	Marblehead
Ashton Danforth	Peabody
Herbert Cartier	Haverhill
Arthur Morse	Newburyport
Walter Smallwood	Groveland
Louis Caron	Salem
Arthur Gordon	Ipswich
Maynard Haley	Rowley
Edwin Williams	Salem
Malcolm Wood	Beverly

Homemaking Department

Bessie Hadley	92.9
Dorothea Burnham	91.7
Arline Pilkington	91.6
Katherine Baillie	91.4
Edith Hall	90.9
Mildred Russell	90.8
Mildred Littlefield	90.7
Ruth Holt	90.1
Elizabeth Hutchinson	90
Evelyn Shaw	89.6
Dorothy Mattheson	89
Viola Richardson	88.8
Ruth Erickson	88.7
Annabell McLeland	88.4
Doris Griffin	88.3
Alice DeCraney	88
Hazel Henderson	87.7
Miriam Whedon	87.6
Evelyn Seobey	87.3
Marjorie Hawkes	87

ELMER SHATTUCK OF LAWRENCE RELATES HIS EXPERIENCES SINCE GRADUATION—NOW EMPLOYED AS BUTTER MAKER AT THE WHITING COMPANY, BOSTON

Just before leaving school I secured a position at the Shawsheen Creamery in Andover. This plant is owned by the American Woolen Company and is one of the most elaborate creameries that I have seen.

The interior has white glazed walls, red tile floors, and modern machinery. Of course, the machinery is painted white which helps to give the dairy a more sanitary appearance.

The Shawsheen Creamery handles about four to eight tons of milk and makes five hundred pounds of butter daily.

Mr. Huggins, the foreman, gave me a wonderful chance to advance and to learn a great deal about the handling and care of dairy products. At first I worked in the receiving room, later being transferred to the pasteurizing and bottling rooms. I was given a remarkable opportunity to get quite a little experience in testing in the laboratory. The different tests consisted of the Babcock Test, Sediment Test, Acidity Test and Methylene Blue Test.

Last, but not least, I was placed in the butter room where I was taught the different operations in the making of high grade butter, sweet and salt.

My next position was with the Hood plant in Lawrence. My duties at Hood's were to receive the milk, weigh it, take a sample of each lot and send the milk to the pasteurizing room, through a two inch sanitary pipe. Here we handled about seventeen tons of milk per day. We tested for butterfat twice a month. Every afternoon after cleaning up the receiving room I figured the amount of milk for that day. Once a week I sent a notice to the two hundred and sixty-six farmers of the amount of milk received from each. In my spare time I was to run off the Acidity, Sediment and Methylene Blue Test. Now and then I would help out in the washing room. I was to visit each one of the farmers as often as I could, trying to encourage them, helping them plan a milk room and giving them information on subjects pertaining to milk. Sometimes I would make arrangements with a farmer to send his milk in to the Hood plant.

I consider this experience worth quite a little, as I met with many new problems. After remaining at Hood's for several months, I was employed as buttermaker at the Vernon Creamery, Rockville, Connecticut. This creamery is located sixteen miles northeast of Hartford.

The Vernon Creamery is one of the few strictly cooperative creameries still left in Connecticut. The only employees are the manager and the buttermaker.

My duties here consisted of running the boiler, receiving the cream, churning, ripening the cream, printing, shipping, testing and a few other operations. The plant made from two hundred fifty to five hundred pounds of butter daily. By working in the



ELMER SHATTUCK

**Lawrence Student, Class of 1924
Praises Aggie Dairy Course**

Vernon Creamery I gained a knowledge of buttermaking, especially speed in printing, and also confidence in myself.

Here I had to learn a new method of printing, but I soon mastered it and can now print faster than ever. A good average is about six hundred pounds an hour. The Whiting plant makes about four tons of butter per day, most of it is sweet butter.

The last move and without a doubt a good one for me was when I secured a position making butter for Whiting's Milk Company, at their Charlestown plant.

In conclusion I can say that I like buttermaking and am confident that I have made a good start on the road to success. Had it not been for the dairy training I received while at Essex Aggie, I could not have advanced to my present position so rapidly.

ELMER SHATTUCK, '24.

OVER 125 AGRICULTURAL STUDENTS NOW GAINFULLY EMPLOYED

At this season of the year when the ordinary student is looking to a long vacation, the students of this School have already started their summer's work. Most of the boys are located in Essex County, but as in past seasons, a few see opportunities to obtain agricultural experience in other localities. An idea of the various types of work which the students are doing may be gathered from the following partial list.

Wallace Addison has obtained work for the summer with the Connecticut Valley Orchard Co., at Westminster, Vt., where he will get excellent experience in commercial orcharding.

Sidney Butler, Fred Reed and George Rippon are employed at the Turner Hill Farm at Ipswich. This farm consists of 160 acres, 125 of which are in apple, pear and plum orchards.

Francis Eldridge is located at the Market Garden Field Station at Waltham.

Henry Ellis is now located at 210 Pomfret St., Putnam, Conn. He is working under Calvin Poore, an Essex Aggie graduate.

Joseph Finocchio has an employed project at the Low Farm in Danvers. His work will consist of care of the lawns and grounds, general work in the dairy and vegetable garden.

Arthur Gordon has an ownership garden project at his home in Rowley. The plans for the 1½ A. vegetable garden were made at the School. In addition to this project, Arthur expects to do general work on nearby farms.

Howard Bredbury is doing general work on the home farm in Andover. His main project consists of a vegetable garden of one acre.

Harry Lear and Wallace Rennie are now at the H. A. Dreer's Nurseries, Riverton, N. J. This is an excellent opportunity for students to obtain experience in the propagating houses of a large nursery.

The students who have been selected to remain at the School Farm are as follows:

Poultry—Albert Egerton, William Wilson.

Farm and Dairy—Roy Frost, Peter Pasukonis.

Floriculture—Fred Walker, Eric Martin.

Fruit—Andrew Baillie, Thomas Gould, Paul Bubier.

Ornamental—Roscoe MacKenna, Joseph Scully.

Market Garden—Louis Caron, Willis Anderson, Frank Burbank, Edward Batchelder and Herbert Cartier.

ESSEX FARMER AND HOME MAKER

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No. 3

THE TOLMAN FRESH-AIR SHELTER FOR YOUNG STOCK A BOON TO POULTRYMEN

Saves on Housing and Raises Healthy, Vigorous, Early Maturing Stock

A few years ago Mr. Tolman of Plymouth County, Massachusetts, conceived the idea of building a light, airy, inexpensive range house which would keep his birds from being crowded or over-heated. His idea was so sound that similar houses to the one he originated have found instant favor throughout eastern Massachusetts, and are spreading into various parts of New England.

Have you ever noticed in the fall that the pullets that roosted in the trees were far superior when housed to those grown in warm, crowded colony houses?

Didn't they really seem a lot better than those that had roosted and sweated nights in the brooder houses? Plenty of fresh air had given them the vigor we want in all of our pullets.

Such were the observations of Mr. Tolman fifteen years ago which led him to construct a cheap shelter, giving protection from varmints, but plenty of fresh, health-giving air.

This idea and type of house, which is cheap in cost, easily moved by two men, giving ample shelter and fresh air, has all at once met with great popularity.

This open growing coop on a good sod range provides conditions similar to those enjoyed by wild birds, freedom from mite, ample ventilation, cool roosting quarters, with no overheating or sweating and germ-laden, dusty air.

Soon after the chickens are weaned from the heat, around May 1, they can be moved to these coops. The time depends on the birds and season. They make a rapid, superior, healthy, growth, come into laying by two or three weeks earlier than those not similarly housed. This early transfer will release the brooder house for another lot of chicks if desired. Some poultrymen plan to have one summer shelter for each brooder house. The shelter can be used until cold weather.

In the main the construction consists of just four posts, with a light scantling frame work covered with wire. The roof is even span, with low overhanging eaves. The floor area is covered with roosting poles—2x2 or 2x3. The four sides are open but the



TOLMAN OPEN AIR POULTRY SHELTER

birds are protected from the storms. A wire door is closed at night.

Every two weeks they should be moved to a new location close by, and the old one cleared of its manure, thus keeping the land sanitary. Two boys or men can easily move it a short distance. They are seven feet by nine feet and are five feet high. Cost is approximately \$15.00.

At the school plant ten of these summer growing coops are in use—100 or more pullets or cockerels to a house—and they are proving to be highly satisfactory. The birds are making splendid growth. These coops can be made to take down and store away in the winter.

These shelters are being rapidly built in Essex County. Drive over to the School and see them. Judge for yourself why they are so popular. The photograph with this article gives a good idea of the shelter.

Blueprints and specifications can be secured from the County Agricultural Agent at the Essex County Agricultural School by writing. Send 25c. to cover costs.

Don't forget Saturday, August 14! Its the big time in the year for all 4-H Club members. Field Day at Essex Aggie, Hathorne, 10 a. m.—4 p. m.

Seven 4-H Canning Clubs have been started in Essex County lately. Two of these Clubs are in West Newbury.

FARM AND HOME WEEK AT MASSACHUSETTS AGRICULTURAL COLLEGE JULY 27-30

Dr. William M. Jardine, Secretary of Agriculture, on Thursday's Program

Farmer's Week at the Massachusetts Agricultural College comes the latter part of July, from the 27th to the 30th inclusive, and gives every promise of being one of the best ever. Secretary of Agriculture, William M. Jardine, will address a big meeting on Thursday evening. Other speakers of note are Dr. James J. Walsh of New York City, Professor F. C. Bradford of Michigan, James C. Farmer, Master New Hampshire State Grange, Professor Harry L. Garrigus of Storrs, and Wayne Dinsmoor of Chicago. Poultrymen will be especially interested to know that Harry R. Lewis of Rhode Island and Roy E. Jones of Connecticut will both be on the program, on Thursday afternoon.

Home Making meetings will be held on all four days, thus making any day on which the farm family attends, of particular interest to the homemaker.

Home flower gardens have a part on the program on Tuesday, and the home vegetable garden on Wednesday.

Demonstrations and talks on Home Canning, both for commercial and family use, will be given on all four days of the week.

Continued on page 4

Essex Farmer and Home Maker HATHORNE, MASS.

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CALENDAR

- July 27-30. Farm and Home Week, Massachusetts Agricultural College, Amherst.
- August 2. County Fruit Growers' Meeting at Turner Hill Farm. Meet there at 10 a. m.
- August 4. Boston Market Gardeners' Association Field Day at Field Station, Waltham.
- August 4. Field Day of Chebacco and Essex County Pomona Granges at Essex County Agricultural School, Hathorne.
- August 14. 4-H Club Field Day at Essex County Agricultural School, Hathorne. Program begins at 10 a. m.
- Sept. 7. Agricultural Department (for first year students) and Homemaking Department opens.

FARM AND HOME WEEK

The eighth annual Farm and Home Week for Massachusetts farmers comes at the Mass. Agricultural College on July 27-30 inclusive. Every effort is made by the various departments of the college to make the time spent here by the people of the State of real educational value. The best agricultural specialists and research men in the east, and often in the country, are brought here to give us the latest information, thus making it possible for us to keep up to date in the new developments in our field. And keep up we must, otherwise we are soon out of the race.

A message will be brought to us by our Secretary of Agriculture, William

M. Jardine, and others, some of whom have been brought from half way across the continent.

This week also gives us an opportunity to get closer to this institution and its staff which is earnestly working for us to make Farm and Home Life more prosperous and pleasant.

ESSEX AGGIE FOR YOUR CHILDREN?

It may not be amiss, at this time of the year, to remind the readers of this paper of the prime purpose for which the Essex County Agricultural School was founded; namely, to train young men and women to "carry on" the agricultural and homemaking interests of Essex County. Many people perhaps have come to think of the institution as a place on which to call for assistance in solving problems of farm or household management, but have you thought of your son's or daughter's future in terms of what this school may do for them? Possibly it may be a neighbor's son or daughter but the idea is the same.

Essex Aggie offers to boys and girls 14 years of age or over, training in the vocations of agriculture and homemaking and at the same time gives much attention to the general training of its students. One half of each day is devoted to the vocational courses while the other half is devoted to certain related studies and general subjects. In the Agricultural Department courses in agriculture are offered in the fields of Dairy Farming, Fruit Growing, Floriculture, Market Gardening, Poultry, Ornamental Gardening, etc., while the Homemaking department work is given in Cooking, Dressmaking, Millinery, Home Nursing, Care of Children, House Planning, Home Ornamentation, etc.

In the Agricultural Department the regular course is 4 years but if the applicant has completed the first two years or more of High School the work may be completed in three years. The Homemaking Department offers a three-year course to grammar or Junior High graduates and a special one-year, all vocational course to High School graduates.

Tuition is free to citizens of Essex County. Students live at home and travel back and forth from home to school each day. Noon meals may be procured at the Homemaking Department. The Fall session for new students in the Agricultural Department and for the entire Homemaking Department opens the day after Labor Day.

Prospective students, their parents, or interested friends are urged to visit the school this summer, as the best way of determining whether or not a boy or girl should be enrolled here for the coming year.

Applications for enrollment should be addressed to Essex County Agri-

cultural School, Hathorne, Mass. and the earlier they are received the better for all concerned.

MAY AND JUNE NOTES FROM THE SCHOOL WEATHER STATION

Max. T. for May, 85, on 3rd.
Max. T. for June, 87, on 30th.
Min. T. for May, 31, on May 5th.
Min. T. for June, 37, on June 4th.
Ave. daily T. for May, 53, (3.1° below normal).
Ave. daily T. for June, 61.5, (5° below normal)
Rainfall for May, 2.13".
Normal rainfall for May, 3.51".
Rainfall for June, 1.71".
Normal rainfall for June, 3.03".
Total hrs. Sunshine for May, 288 or 63.6%.
Total hrs. Sunshine for June, 292 or 63.8%.
Total possible for May, 453 hours.
Total possible for June, 457 hours.
The outstanding features concerning the weather continue to be the comparative coolness and unusual dryness. Since January the average monthly temperatures have run from 3 to 5 degrees below normal and killing frosts were experienced on the night of June 16-17 and less severely on June 19-20.
Since the storm of May 16th there have been no heavy rains and the total rainfall for the first 6 months is now more than 5 inches less than the normal for the period.

TIMELY FRUIT NOTES

Cover Crops

If you have cultivated your orchard this spring and summer, it is now time to sow it down to some cover crop in order to arrest late growth of your trees and insure that they go into the winter in the proper condition. A tree that grows late is liable to winter injury. The cover crop sown now will take the plant food and moisture and cause the wood of the tree to change from a succulent to a hardened condition, the proper one for winter. Buckwheat, barley, rye, clover, and millet seem to give good results.

Railroad Worms

If you did not spray your apple trees for railroad worm (apple maggot) during the first week of July, you can still help to control that pest by destroying the immature apples which drop at this time of the year. Other pests are also controlled by this means.

Don't Spray Too Late

Spraying early apples after July 15 with an arsenical spray is of questionable value, and there is danger of a spray residue remaining on the ripe fruits.



EXTENSION SERVICE



ALFALFA YIELDING WELL IN ESSEX COUNTY IN SPITE OF DROUGHT

This has certainly been a dry, unfavorable season for farm crops, particularly the hays. Light crops are the rule, not only in Massachusetts, but most of the other New England states.

One hay crop, however, seems to be at par, and this is Alfalfa. Mr. Forest Rust of Topsfield reports that they hauled fifteen heavy two horse loads of No. 1 hay into the barn, off of seven acres. Going some, isn't it? This, by the way, was only the first cutting, and there will be at least another cutting, if not two. Mr. Rust says he has averaged a good strong four tons of this excellent hay per acre on three cuttings a year. He now has about ten acres of alfalfa, having sown close to three more, around June 20. This new seedling, when last seen by your County Agent, was up three inches, and looking thrifty. It puzzles most of us on how it can get a start in such a dry season. This may be explained in part by the deep roots it makes. The County Agent has personally dug up a one-year-old root which was 31 inches long.

Another interesting yield of Alfalfa is reported by Mr. Jack Lindsey of the Monstone Farm, Ipswich. He reports 25 two-horse loads off of ten acres, and the second cutting is coming along fast.

Top dressing with chemicals is usually a very beneficial and paying practice, especially on a good vigorous sod, but this year, with so little moisture, hay land treated in this way does not show the usual response. Moisture is necessary to dissolve the chemicals before they can be absorbed by the plant.

Dairymen who have a hay shortage staring them in the face can alleviate it to some extent this year by plowing up a moist, somewhat run out hay field. Immediately after plowing sow one of the millets. They are a good catch crop, growing well in a hot, dry season. Plow the sod deep, disc well, and harrow for a fine and very compact seed bed. Disc in a good application of manure or at least 500 pounds of a 4-8-4 fertilizer. Sow about a bushel of seed per acre, and roll well. Millet will mature for hay in 60-80 days, and usually give a good yield of very good hay. Cut it before the seed is formed, and feed sparingly to horses.

Our problem in New England is to raise all the roughage of the highest possible quality, so that we can cut down on the grain fed to cows.

THINNING FRUIT ON TREES WORTH \$1.00 AN HOUR TO FRUIT GROWERS

Now is the time to thin fruit on apple, pear, peach and plum trees, to get that higher quality and larger size. Various fruit men have estimated their time as worth one dollar an hour thinning apples; some places they figure as high as two dollars an hour. If your time is worth more than the above amount at some other job, you cannot afford to thin your fruit.

By thinning, the grower not only increases the size and quality of the harvested fruit, but decreases the number of culls and second grade fruits. At this time of year the grower can easily notice the deformed and blemished specimens which are to be removed, leaving only the best ones to mature. Since curculio fruits seem to be very common this year a close watch should be made for them. Removing and destroying these injured fruits will aid in controlling this as well as other insects.

Most varieties of apples should be spaced about six inches apart. Varieties like Wealthy, Yellow Transparent, and Delicious, which tend to run small or poorly colored should be spaced eight inches apart.

Brown rot on stone fruits (plums and peaches in particular) is encouraged by a heavy set, and they should be thinned at least so that no two fruits may touch.

Some growers get good results thinning their fruit by piece work. A careful boy with a pair of thinning shears and a step ladder can thin a good many trees in a day.

Don't say you haven't time to thin your fruit. It's all got to be picked some time anyway, and can be picked quicker and cheaper now, to say nothing of losing the job of picking number twos and ciders next fall.

CHEBACCO AND ESSEX COUNTY POMONA GRANGES TO HOLD FIELD DAY AT HATHORNE, WEDNESDAY, AUGUST 4

Essex County's Pomona Granges have united for a field day at the Essex County Agricultural School on Wednesday, August 4. A rather elaborate program is being arranged for the occasion by the joint committee in charge.

Speakers and a sports program will be featured and announced in the press as soon as completed.

Better plan for a piece of Alfalfa next year. It is not affected by drought and yields more and better hay than any other known hay crop.

ESSEX COUNTY BOYS AND GIRLS RECEIVE STATE WIDE RECOGNITION

Eight Essex County boys and girls will enjoy a week of rest and recreation at Camp Gilbert, Amherst, commencing Friday, July 23. These young people have done so well in 4-H Club Work that they won County Championships in their division, and thus the honor and award.

This Club Camp is held at the Massachusetts Agricultural College, under the supervision of the Extension Service.

The following boys and girls will make the trip by auto:

Club Champions—1926

Clothing

Elizabeth Shay Methuen

Garden

Arthur Gordon Rowley

Food

Constance Ireland Gloucester

Poultry

Charles Mason Andover

Canning

Hazel Fowler West Newbury

State Champions—1925

Clothing

Elizabeth Sullivan North Andover

Small Fruit

Benjamin Ogden Middleton

The Dairy Club Champion has not been chosen as yet as the two leading contestants are doing such a good job that it is very difficult to choose the Champion. However, as soon as the Champion is chosen, his name will appear in this publication.

CLUB FIELD DAY

On Saturday, August 14, all Essex County Club members will meet for their Annual Field Day at the Essex County Agricultural School.

The program begins at 10 o'clock and ends at 3.30 or 4.00 in the afternoon.

The day has been divided into three parts so that everybody will have a hand in the program. All sorts of judging contests will be held as well as various athletic events. Besides these there will be a short entertainment and a half-hour of singing and cheering.

We may possibly be lucky enough to have Mr. Farley, the State Club Leader, there. And if we do I am sure there is not a single Club member who will want to miss his talk.

Not only do we want every Essex County Club member there, but we want all the parents that can possibly come. The only way parents can get better acquainted with Club Work is to come to these Field Days and see what the boys and girls are doing.

FARMER'S WEEK

Continued from page 1

Tuesday and Wednesday are the two big fruit days. Farm Forestry and Bee Keeping each have their own programs on Thursday.

Wednesday and Thursday have been designated as poultry days, and, like the fruit section, have a very worth while program.

Livestock men hold forth on Wednesday all day, and the dairymen on Thursday.

Send for a program of Farm and Home Week which can be had by writing to your County Agent at the Essex County Agricultural School, Hathorne.

Be sure to register, upon arrival, at one of the Information Booths. Those doing so, will be kept posted throughout the year on the subjects which they are particularly interested in.

Rooms may be had by applying in advance to the Supervisor of Extension Courses, Massachusetts Agricultural College, Amherst. Good meals can be had at the Dining Hall at very low rates. Camping out for the week is becoming very popular and good camp sites are provided for the purpose. Why not plan to make this week part of your vacation, assuring both pleasure and profit?

NOW IS THE TIME TO DO SUMMER CULLING

Get Rid of the Slacker Hen!

Can you tell the layer from the slacker when you see them? If not, read the following article. Follow the points given and with a little practice you can do it.

The season has now arrived when the hens on the lower egg producing level begin to go on strike. There is much written about year around culling but the major part must be done in the months of July, August, September and October.

The poultryman using trap-nests has no difficulty in removing the non-producers but those without must rely upon external characteristics. The molt, pigment, condition of pelvic bones, abdomen and comb are the most important factors to observe. We estimate that the average decision in culling will be correct in at least 75% of the cases. It is easy to identify birds not laying at all; the only difficulty is likely to come in recognizing layers which are producing but not enough to be profitable.

Culling should be a continuous process from now until the minimum number of birds are left which is desired to hold over a second year. The earlier a hen is removed after she stops laying the better the market price received and the less feed she will consume at your expense.

VEGETABLE GROWERS' ANNUAL FIELD DAY

August 4 marks the date on which FIELD DAY will be observed at the Market Garden Field Station at Cedar Hill, Waltham. The hours are from 10 to 4. This institution is a sub-station of the Massachusetts Agricultural College designed and maintained for the purpose of conducting experiments and demonstrations in behalf of the vegetable growing industry of the state.

On the date indicated everybody interested in gardening, commercial or otherwise, is invited to visit the station for the purpose of observing the scientific work in progress as related to vegetable production.

Specialists will be available for personal consultation on plant diseases, insect pests, soil fertility and other problems of the grower. Bring your samples of disease and insect injury along with you for diagnosis. If you suspect certain areas of your soil of acidity we will be glad to test samples of the soil for you, and recommend treatment.

A complete line of gardening tools and machinery will be on display,—motor cultivators, hand cultivators, irrigation systems, weeders, seeders, tying machines, thinning machinery, sprayers and dusters.

The ladies will be interested in learning that Prof. W. R. Cole, Specialist in Food Preservation will be at the station with his home canning equipment and will be glad to discuss with interested individuals the problems relating to home preservation of fruits and vegetables. In addition to this Miss Beatrice Billings of the Middlesex County Extension Service will be present with an exhibit of great interest to homemakers.

E. M. Lewis, President of the Massachusetts Agricultural College, will give the address of welcome immediately after the luncheon hour.

To serve the needs of those who do not bring their lunch, a caterer will be in attendance.

The Field Station lies to the northeast of Waltham Center, between Waverly and Waltham on Beaver Street. In case of confusion inquire for Cedar Hill which is a well known location in the vicinity.

RAY A. KOON.

TIMELY SUGGESTIONS TO THE HOME GARDENER

To the asparagus grower an application of 4-8-4 fertilizer at the rate of about 30 pounds to a hundred feet will prove beneficial to next season's crop, as on the growth of the shoots made this year will depend the success and yield of next year's crop. Either a spraying of arsenate of lead or a dusting of the same would be beneficial to control the asparagus beetle, which will be noticed at the present time.

POULTRY POINTERS

Look Out For Red Mites

As the warm weather starts, look out for Red Mites, one of the worst of the poultry pests. They weaken the vitality of the layers and cause a severe loss in egg production. In young stock they cause great damage by sapping their vitality if they get established in the growing coops.

These mites inhabit the entire house, but most especially the coops and surrounding walls. At night they suck blood from the fowls, and in the daytime live and breed concealed on the underside of roosts and in neighboring cracks. When gorged with blood they are distinctly red in color, hence their name; but at other times they are less conspicuous, appearing like specks of gray dust.

Control

The first step in controlling this pest is to clean the house thoroughly, especially the nests, roosts and adjoining walls. The secret of success is to get there first. An early and thorough spring painting of the roosts with undiluted carbolineum, zenoleum, protexol, standard disinfectant, crude carbolic acid, cresol, lime sulfur, crude oil or creosote eliminates the need of many later treatments. In old houses, having many cracks, whitewash is a splendid agent, especially when one pint of disinfectant is added to each gallon of whitewash and some salt or glue is dissolved and mixed in to make it more adhesive.

At the poultry plant of the Essex Co. School, a spray of five gallons of kerosene, to which one cup of Crude Carbolic Acid has been added is found to be very effective. This is used every ten days or two weeks during the hot weather and is sprayed on with a face pump, covering the areas around the dropping boards, roosts, supports and walls adjacent. Spray this on in the morning so as to give it time to dry before night. The crude carbolic kills the mites and the kerosene acts as a carrier, penetrating all the cracks and joints.

For the back yard gardener who may have a few potatoes, sprayings or dustings of Bordeaux, two or three applications at intervals of ten days, should be made to control blight. If the potato bugs are still working, arsenate of lead should be added to this spray.

Those who grow tomatoes should apply a half handful of acid phosphate about the roots to secure better results, mixing it thoroughly in with the soil, as phosphate will hurry the development of the fruit as well as increase the size.

Purple Top Strap Leaf or White Egg varieties of turnip should be planted this week to secure large enough roots for wintering purposes.

ESSEX FARMER AND HOME MAKER

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Vol. 7

HATHORNE, MASS., SEPTEMBER, 1926

No. 4

ESSEX AGGIE GRADUATE NOW INSTRUCTOR AT STORRS, CONNECTICUT

Will Also Assist on the Coaching
Staff of the College

Wallace S. Moreland, Essex Aggie 1921, Connecticut Aggie 1926, is now employed by the Connecticut Agricultural College as an instructor in poultry husbandry. He has also been selected by the athletic department to assist in the coaching of the varsity and freshman football squads. While at Essex Aggie, "Woppy" made an enviable record both in his studies and on the athletic field and to all accounts this record has been repeated. The following paragraphs are quoted from "The Connecticut Alumnus" and they will give a hint as to what has become of one "Essex Aggie grad."

"Wallace S. Moreland, '26, quarterback on the Aggie eleven for the past four years, has been appointed by the Athletic Department to assist in the coaching of the varsity and freshman football squads.

In his freshman year Moreland made good as a backfield man. Coming to Storrs before the one year rule was in effect, he quickly demonstrated his football ability and was placed on the regular Aggie eleven of 1922. He has been a fixture in the Blue and White backfield since that time, being the leading punter and forward passer, besides being a good ball carrier and an excellent man in the interference and on defense.

At the close of the past two football seasons, "Wally" was placed on the "Hartford Courant Mythical All-Valley" team as quarterback and on the "All-Time Connecticut Football team" composed of former C. A. C. football stars.

Moreland is employed by the College as an instructor in Poultry Husbandry and is also the Storrs correspondent for several of the leading newspapers in New England. He will devote part time to football during the first three months of the college year."



New Homemaking Building at Essex County Agricultural School

SCHOOL NOW BETTER EQUIPPED TO TEACH SCIENCE OF HOMEMAKING

The time has come at last when it is considered necessary for a woman to know how to keep her house in a scientific way. In the past it was thought that anyone too stupid to do anything else, could do home work. However, if a woman was by chance a good cook, that is, if she knew how to make food appetizing and attractive to the eye, she was considered "smart." A good cook was something to be prized. Fortunately nature provided that some women should be natural cooks, even though they knew nothing about the scientific reasons for the results they obtained, and thus the Science of Cookery progressed in spite of handicaps.

At the present time there is no excuse for any woman not having a knowledge of scientific Homemaking. I like that word, Homemaking, its meaning is so much deeper than Domestic Science or Household Arts. It means making a home in every sense of the word. The old saying that "the hand that rocks the cradle, is the hand that rules the world," is just as true today as it was when a woman did rock the cradle in which her baby slept. Not only should a woman understand foods and clothing, but she should know how to furnish and decorate her home, how to keep it clean and attractive without spoiling its homeliness. She should understand the

rules of health. Sunshine and fresh air are a very necessary adjunct to a healthy home life, and no day should pass in which members of the family do not spend some part of the day out of doors. Unless the weather is very bad there is no need to keep the family in. Have you ever noticed how few colds children and grown people have, if they are in the habit of going out of doors every day, and how much stronger it makes them?

We now know that rocking a child is very bad for his nerves, and that he should be placed in his crib in a quiet, darkened room and allowed to rest and sleep naturally. That a baby should be fed at regular intervals, dressed in loose short comfortable clothing, and given plenty of fresh air. There are many books and pamphlets that are published and given free to any woman who is interested enough to ask for them. The Federal Government, City Clinics, Health Centers in nearly all cities and towns are ready to give help and advice in the broad field of Homemaking.

Our own Essex County is doing a very large share toward educating women, through its Extension Courses for Adults, and its Homemaking School for Girls; thus improving the homes already made, and laying a foundation for the homes of the future.

AGRICULTURAL FAIRS

Topsfield	Sept. 15-18
Eastern States	
Springfield	Sept. 19-25
Brockton	Oct. 4-9

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the
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CALENDAR

- Sept. 7 School opens, both departments.
Sept. 27 Advanced Agricultural students enter.
Nov. 23 Graduation exercises, Class of 1926, at the Peabody Institute, Danvers.
Nov. 23 Open house in the New Homemaking Building, to the Alumni and friends of the school.

AGRICULTURAL SCHOOL WILL TAKE PROMINENT PART AT THE TOPSFIELD FAIR

Our Agricultural School at Hathorne will take an active part in the County Fair at Topsfield this year. Most of the departments at the School will have educational exhibits in the various buildings, but the central exhibit will be in the grange building, occupying the same two bays as last year. Here both resident instruction departments as well as Extension will be represented by exhibits. It is the aim of these exhibits to give a cross section of the activities of the school.

Students in the Fruit Department will demonstrate the grading of apples, based on the Massachusetts Apple Grading law. The culls will be taken over to the other side of the exhibit, where the girls from the Homemaking Department will show how to use them in making jellies. Boys from the Vegetable Department will grade and pack tomatoes; the girls will be through making jelly and will then show how to make salads. There will also be many interesting charts and pictures showing other activities of the School. The Extension folks will show what they have been driving at this year. The County Agent will show how the increased use of roughage will save the dairyman money on his grain bill. He will

also show how Red Mite and Scab were controlled by his co-operators in the Better Fruit Campaign. Miss Crawford, Home Demonstration Agent, will show models of health homes.

Every poultryman should see the educational poultry exhibit of the School at the Poultry building. The poultry instructors and the County Agent will show how good healthy birds can be raised on the range. A model poultry range will be laid out and life size pieces of equipment as well as the new Tolman shelter will be in the exhibit. Professor William C. Monahan, Extension professor of Poultry Husbandry is scheduled for daily talks.

The fruit show has reserved 55 feet of table space for educational exhibits. Prof. William Cole of the Extension service will show a large exhibit taking up 44 feet, devoted to fruit insects and diseases. Actual specimens will be shown. The County Agent and Instructor Wood of Hathorne, will have an exhibit showing how equal yields of sprayed and unsprayed apples grade out.

A vegetable exhibit by the school in the Vegetable Department will show how to properly prepare and arrange vegetables for exhibit.

Of particular interest will be the big 4-H Club show in the new building. Here the visitor can get a very interesting cross section of what this department is doing. Every type of club will exhibit.

An invitation is extended to all to make themselves acquainted with the Extension workers and instructors at the various exhibits.

COOLING MILK BY ELECTRICITY

A letter from the Portland Cement Association tells of a recently developed design for milk cooling tanks making them adaptable to mechanical refrigeration.

The tanks are of concrete with a layer of insulating material such as cork board inserted in the walls and bottom. The wood cover also contains a layer of cork board or similar material and has a felt lining around its edge to make it fit the tank tightly. Holes are left in the concrete walls to receive the pipes from the electric refrigerating machine.

Dairymen contemplating the construction of milk cooling tanks like the above or for using ice or running water, may secure full details by communicating with the School.

WHY CAN TOMATOES?

The tomato was at first called the "love-apple," and although we know of no love charm which it exerts, modern scientists have found that it is one of the most important vegetables in the American dietary today.

When we are being urged these days to use raw vegetables whenever

possible, it is consoling to know that canned tomatoes are almost as valuable in the diet as the fresh ones. Besides adding color to a meal, tomatoes contain minerals, organic acids and Vitamin C, so necessary in preventing scurvy. This vitamin is generally quite easily destroyed by cooking, but the acid in the tomato helps to preserve it even when cooked or canned.

Of course every housewife will want to use fresh tomatoes when they are in season and plentiful, but in the winter when the fresh ones are beyond the reach of most of us, it is consoling to know that this vegetable canned has an important place in the diet. It may be substituted, either fresh or cooked, for orange juice, and is given to very young babies. To be certain that enough Vitamin C is contained in the diet, orange or tomato juice should be served to children and adults at least twice a week.

Now is the time to prepare for next winter's supply. There is no vegetable more easily canned than the tomato, and none which will give you more health and satisfaction next winter.

MAY E. FOLEY,
State Nutrition Specialist.

JULY AND AUGUST NOTES FROM THE SCHOOL WEATHER STATION

Max. T for July, 101° on 22nd.
Max. T for August, 92° on 8rd.
Min. T for July, 47° on 5th, 15th.
Min. T for August, 45° on 23rd.
Ave. daily T for July, 68.2° (3.5° below normal).

Ave. daily T for August, 67.7° (2.2° below normal).

Rainfall for July, 2.25".

Normal for July, 3.36".

Rainfall for August, 2.23".

Normal for August, 4.03".

Total hours sunshine for July, 281, or 60.5% of total possible hours of sunshine.

Total hours sunshine for August 248, or 57.6% of total possible hours of sunshine.

During the two months there was a total of 13 days entirely clear, 44 days partly cloudy, 5 days no sun.

On the morning of September 1st there was recorded a minimum temperature of 41° which is the lowest temperature since the frosts of June 17th and 20th. Slight frosts occurred in various parts of the county during the last few days of August or the first day or two of September. Weather conditions abnormally dry and rainfall for the year is from 5—7 inches below normal in the county.

Although the average temperature was below normal, the temperature on July 22nd was one of the highest ever recorded at the Boston office. At many points in the county there was a temperature of one to three degrees higher than that recorded on the School hill.

H. A. M.

ESSEX COUNTY EXTENSION AGENTS

Robert B. Ewing, County Club Agent;
Miss Marion P. Crawford, Home
Demonstration Agent; Henry
W. Fienemann, County
Agricultural Agent

We want our readers more familiar with the Extension Service of the Essex County Agricultural School. Meet the three Agents in the accompanying picture.

Mr. Robert Ewing, on the reader's left, heads up the 4-H Club work. Be sure to see the exhibit of this department at the Topsfield Fair.

Miss Marion Crawford, our Home Demonstration Agent, will be recognized by many of the ladies. Her work is carried on in every town in Essex County.

Mr. Henry W. Fienemann, our County Agent, on the reader's right, is supposed to know all about farming. At least, this is the opinion of the amateurs.

Now that you have met the Agents, we want to tell you about their work. In the first place, the Extension Service is a far wider organization than we may realize, the work being carried on in several thousand counties of the United States, scattered throughout every state in the Union.

The whole Extension organization is a co-operative one, made possible by the Smith-Lever Bill. National supervision of the work is delegated to the Department of Agriculture at Washington. The Agricultural College in each state is designated as the co-operating agency between Washington and the individual counties of a state. One of the National requirements is that a county wide agricultural organization co-operate with the State College and the U. S. Department of Agriculture, which in Essex County is our Agricultural School.

In local terms, the Extension Service is the organized educational agency of the Essex County Agricultural School which serves the people of the county, other than resident students. It is the job of the Agents to make available to our citizens, the useful and practical information in Agriculture and Home Economics developed by the Experiment Station and the United States Department of Agriculture. The Agents in co-operating with the State Specialists teach better farm and home practices in an effort to gain their widespread adoption, thus to increase profits and improve home conditions on Essex County farms. This teaching is done by means of demonstrations on farms and in homes; through Extension Schools, exhibits, tours, farm visits, news letters, correspondence courses, etc.

Miss Crawford, Home Demonstration Agent, is now organizing her Nutrition classes. About twenty of



ESSEX COUNTY EXTENSION AGENTS

Left to Right—Robert B. Ewing, Marion P. Crawford and Henry W. Fienemann
Our New Homemaking Building

these will be conducted under her direction this fall and winter. Classes in making children's clothing, as well as ladies' millinery, will also be held this season. Housewives on farms often walk a quarter mile to bake a lemon pie, due principally to poorly arranged kitchens. This is a new project which Miss Crawford is organizing this year. House wives interested in these or any other home problems are urged to get in touch with her.

Mr. Ewing has a large and interested group of boys and girls organized into various Clubs throughout Essex County. Groups of five or more girls can organize a Club, secure an interested woman as leader and take up canning, sewing, cooking, handicraft, or even some of the Agricultural projects. Certain requirements must be met, records kept and regular meetings held before the succeeding year's work can be taken up.

Boys can organize into garden, pig, poultry, rabbit, dairy or fruit clubs. Securing an interested man or woman as a local leader vastly increases the interest in and benefit from the club. Field trips, Club picnics, tours and contests add much to the educational and social benefits. The boys must keep accurate records if they wish to win prizes, or even recognition for their year's work. To become a County champion in any project is every 4-H member's ambition, since it entitles him or her to a week's stay at the Annual State Club Camp at the Massachusetts Agricultural College.

County Agent Fienemann has put most of his emphasis so far this year on to the fruit and dairy projects. Pruning classes were held about the county late in the winter. Timely information on spraying, fertilizing and thinning was carried on with groups totaling 195 fruit growers. The object was not raising more, but better

fruit, since second grade fruit is a drug on the market. Especial emphasis was put onto Red Mite and Apple Scab Control.

Our dairymen annually spend more money for grain and feed than any other item. This is not necessary nor sound. By raising the quality and amount of roughage possible, a saving of 15% can be easily made on the grain bill, meaning over \$100,000 to our dairymen. Having this in mind, demonstrations and meetings explaining how to do it, were held over the county. Dairymen were induced to plant alfalfa and more clover. Also to top-dress their grass land and raise more hay per acre.

Both the fruit and dairy work will be continued and a poultry project will be submitted to the poultrymen for their approval this fall.

All this Extension work is conducted at no further cost to the people of Essex County, being a department of the Agricultural School and supported by public funds. Everyone in the county is therefore invited and urged to use these Agents to the limit.

CONTEST FOR DRAFT HORSES

The contest of pulling horses, a contest as old as the oldest fair in Massachusetts, is to receive a new lease of life in Massachusetts this year due to the purchase of a dynamometer for registering horse power. Fair officials have taken an active part in making this machine available, joining their interests with other fairs of the state in purchasing this machine. There is no attraction at any of our fairs that creates more genuine interest on the part of lovers of live-stock than to witness a properly conducted pulling contest whether it be horses or oxen. This dynamometer will put these contests on the right basis and should help greatly in stimulating the interest of the people to a greater attendance at our agricultural fairs.

SCHOOL POULTRY PLANT COMPLETES VALUABLE EXPERIMENT ON THE USE OF COD LIVER OIL FOR LAYING AND BREEDING STOCK

This past season the Poultry Department of the Essex County Agricultural School carried on an experiment for 32 weeks, using Cod Liver Oil on its birds in varying amounts to determine its effect, if any, along various lines.

The ten points on which accurate data and records were kept are as follows:

1. Blood Spots: The number and size of same.
2. Mortality Rate: The cause of all deaths.
3. General Health of the Birds: Weight, general looks and condition, pigmentation, feathers, activity and appetite.
4. Egg Production: Weight of eggs, texture of shell, etc.
5. Fertility of eggs.
6. Hatchability of eggs.
7. Livability of Chicks.
8. Broodiness.
9. The Resulting Products: The Egg—Its food value, taste and odor. The Hen—Her weight every two months. Condition of the meat as to flavor, tenderness, etc.
10. Effect of weather conditions on the birds.

Space will not permit a detailed ac-

count of the experiment as it was conducted, but a few of the outstanding facts as presented by Instructor Moore at the Poultry Convention, Farmers' week, at Massachusetts Agricultural College this year, follows. The accompanying tables will give the resulting data obtained from most of the experiments.

The birds used in this experiment were Rhode Island Red pullets, hatched during the month of March, housed in the Essex County Laying House, fed and cared for, and all other conditions, as far as possible, being similar in all pens with the one exception of the amount of Cod Liver Oil that was fed. The oil was fed in the following manner: It was mixed the night before with two quarts of ordinary cracked corn, stirred the following morning again and put on top of the dry mash in the mash hoppers. It was fed three times per week. The amount fed to the various pens was as follows:

Pen No. 1 was the check pen and received no oil whatever.

Pen No. 2 received 1/3 pint per 100 birds per week.

Pen No. 3 received 1/2 pint per 100 birds per week.

Pen No. 4 received 1 1/2 pints per 100 birds per week.

Pen No. 5 received 3 pints per 100 birds per week.

The experiment started November 25 and ended July 7. The feed schedule for the birds was as follows: Eastern States Buttermilk Mash was before them all the time in hoppers. From November until the first of March, whole corn was used in their rations and fed as a straight feed at night and whole corn wheat, and oats in the proportion of three to one were fed in the mornings. Beginning the first of March, we gradually shifted from whole corn to cracked corn and gradually replaced the night feed of straight corn with the ordinary three to one mixture. The birds received cabbage as green feed until the first of December, mangel beets from then until the first of March, and germinated oats from that time until the completion of the experiment. In addition, semi-solid buttermilk was supplied them during April, May and June.

Cod liver oil used in this experiment was tested oil, and the same lot of oil was used during the entire experiment.

Summary of Some of the Outstanding Factors of Results

The birds showed no signs of any dislike for the oil. In Pen No. 5 all

Results of Cod Liver Oil Experiment Conducted by Instructors A. W. Doolittle and W. B. Moore at the Essex County Agricultural School Poultry Plant

Blood Spot Record Jan. 6—July 7				Mortality of Pullets			Egg Production			
Pen No.	Percent	Eggs	Estimated Loss*	Total Deaths	Percent	Estimated Loss	No. Eggs	Amount Received	Result of Oil	Cost of Oil @ \$3 gal.
1	4.4	234	\$10.67	9	12	\$18.12	6501	\$308.34		
2	3.2	211	9.65	12	15 1/2	24.95	7869	372.29	63.95	\$ 3.32
3	2.6	190	8.56	5	6 1/2	10.40	8552	399.49	91.15	6.65
4	2.0	143	6.67	3	4	6.14	8272	391.06	82.72	13.30
5	2.0	170	7.87	2	2 1/2	4.03	9573	445.39	137.05	26.60

*Number of birds at average weight for season at 33c.

FERTILITY (Fertility—average of five hatches)

Pen No.	Eggs Set	First Test	Second Test	Percent of all Eggs Removed	Average Fertility
1	1008	7.3%	3.6%	10.9	94.6%
2	923	9.8%	2.1%	11.9	94.1%
3	887	7.7%	2.2%	9.9	95.1%
4	1025	7.2%	2.8%	9.5	95.3%
5	1063	6.1%	1.6%	7.7	96.2%

HATCHABILITY RECORD

Pen No.	Total Eggs Set	Average Hatchability	Returns Per 1000 Eggs*	Aver. Wt.
1	1008	53.9%	\$134.75	
2	923	63.6%	159.00	
3	887	63.3%	158.25	
4	1025	68.8%	172.00	
5	1063	72.1%	180.25	

AVERAGE WEIGHT OF PULLETS

	Aver. Wt.	Aver. Wt.	Aver. Wt.	Aver. Wt.	Aver. Wt.
	11/11/25	1/29/26	4/6/26	5/14/26	7/6/26
	5.6 lbs.	6.2 lbs.	6.3 lbs.	6.2 lbs.	6.2 lbs.
	5.9 lbs.	6.5 lbs.	6.5 lbs.	6.5 lbs.	6.3 lbs.
	6.1 lbs.	6.5 lbs.	6.4 lbs.	6.4 lbs.	6.2 lbs.
	4.9 lbs.	6.6 lbs.	6.6 lbs.	6.6 lbs.	6.4 lbs.
	4.6 lbs.	6.6 lbs.	6.6 lbs.	6.4 lbs.	6.5 lbs.

*At 25c per chick.

of the birds were in the pink of condition during the entire test. In other words, they retained their pullet looks, had abundant of pigment, glossy feathers, etc.

No taste or odor was apparent at any time from any pen indicating the use of Cod liver oil. Several of the birds in Pen No. 5 were killed at the end of the experiment and no taste or odor could be detected in the meat of any of the birds.

The tables follow, and a careful analysis of the same will indicate to

you that the Poultry Department of the School are recommending the use of Cod liver oil to laying hens and breeders as a supplementary feed that will return a good dividend on the money invested.

It might be said that this article and the tables herein are the only ones that the School are responsible for and can vouch for accurately. Several commercial firms in attendance at the lecture at Amherst have put out more or less information regarding this test, none of which have the official sanction of the School.

SELECTING PULLETS HENS AND BREEDING MALES

Cull Before Placing Birds Into Winter Quarters

At this season of the year, poultry keepers are housing their young stock for the coming season, and special care should be taken that only the very best specimens of the breed handled should be kept.

No pullets should be housed that have any physical defects, such as black feathers in white birds, feathers on clean-shanked birds, single combs on rose-comb breeds, crooked backs, wry tails, crooked beaks, crippled toes, or birds with badly deformed keels. Look out for sick ones.

It is important that the pullets should be well developed as to size and weight before housing. Pullet breeding has had the tendency to produce small pullets. Make sure that the birds are up to the standard weight for the breed. Leghorn pullets should weigh 3½ lbs., at least, Plymouth Rocks, 6 lbs., and Rhode Island Reds, 5 lbs. It is important that the pullets go into their winter quarters in good flesh so that they will be in condition to stand the heavy strain of egg production which we are expecting.

It is well to select the birds by daylight, as good and bad points can be much better observed than at night. Be sure that all the birds are blue-lutted for lice.

Many of us have to keep over some old birds for our layers as well as for the breeding pens. One does not have to be an expert in culling to pick out the best ones to save for another year. The points given below, if followed, will help us in our selection.

Moulting or condition of plumage is one of the best indications of rate and length of laying. A hen with dirty plumage, feathers that appear ragged, and tail feathers that are broken as well as ragged is usually a good layer.

The best layer starts laying first and stops last, while the poor one starts last and stops first.

The following points give the conditions to look for in a good bird to keep and also what to look for in those to reject.

Good Birds

Constitutional Vigor

Shown by bright, prominent eye, deep broad chest, robust appearance.

Comb

Laying hens have a full red waxy comb.

Vent

Moist, extended.

Laying Condition

Span from pin bones to end of breast bone, 3 to 5 fingers. Two or three fingers spread between the pin bones.

HATCHIBILITY RECORD

		Pen No. 1		Pen No. 2		Pen No. 3		Pen No. 4		Pen No. 5	
Date Set		No. Eggs	Per Cent	No. Eggs	Per Cent	No. Eggs	Per Cent	No. Eggs	Per Cent	No. Eggs	Per Cent
Jan. 12		120	56.5	93	64.5	82	69.5	133	76.0	120	80.6
Feb. 3		120	59.2	120	59.8	118	60.2	120	70.0	120	65.0
Feb. 28		217	47.5	160	51.2	152	55.3	251	47.6	246	53.7
Feb. 28		120	50.0	120	65.8	120	58.3	120	64.2	120	74.2
Mar. 9		283	63.8	276	70.0	265	60.3	251	76.5	300	78.0
Apr. 24		148	47.8	154	70.7	150	76.6	150	77.9	157	81.4
Total Eggs Set		1008		923		887		1025		1063	
Average Hatchibility		53.9		63.6		63.3		68.8		72.1	

VIABILITY OF CHICKS

Mortality During First Five Weeks

Experimental Percent Mortality

Pen 1	58%
Pen 2	23%
Pen 3	8%
Pen 4	15%
Pen 5	9%

Control

Reds	11%
Rocks	11%
Leghorns	9%

MORTALITY OF PULLETS

Pen 1 9 birds	Pen 2 12 birds	Pen 3 5 birds	Pen 4 3 birds	Pen 5 2 birds
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CAUSE OF DEATH

Cancer	1
Over Fat	1
Roup	1
Tuberculosis	1
Bronchitis	1
Heart Rupture	2
Undetermined	3
Prolapsis	21

SUMMARY OF RESULTS (Percentage)

	Pen 1	Pen 2	Pen 3	Pen 4	Pen 5
Egg Record					
Production	38.3%	47.0%	51.2%	49.2%	56.6%
Blood Spots	4.4%	3.2%	2.6%	2.0%	2.0%
Weight of Eggs	57.1 G	58.6 G	57.9 G	58.8 G	58.0 G
Fertility	94.6%	94.1%	95.1%	95.3%	96.2%
Hatchibility	53.9%	63.6%	63.3%	68.8%	72.1%
Viability of chicks	42 %	77 %	92 %	85 %	91 %
Pullet Record					
Number of Broody Birds	105	84	77	105	78
Body Weight at End of Experiment	6.2 lbs.	6.3 lbs.	6.2 lbs.	6.4 lbs.	6.5 lbs.
Mortality	9	12	5	3	2

Moult

Late moulting.

Pigmentation

Yellow color, bleached out in vent, beak and shanks.

Quality

Soft, velvety skin, fine texture in shanks, comb and wattles.

Cull Birds**Constitutional Vigor**

Dull, sunken eye, shallow chest, weak sickly appearance.

Comb

Hens not laying show small shriveled comb covered with powdery scale.

Vent

Dry, puckered.

Laying Condition

Span of 1 to 3 fingers. Pin bones close together. Hard abdomen.

Moult

Early moulting.

Pigmentation

No, bleach showing.

Quality

Dry, thick skin. Coarse texture in shanks, comb and wattles.

The Kind of Male Birds to Keep

The male should have vigor and vitality and not be below weight for the breed. He should be free from any physical defect as outlined at the beginning of this article, and have plenty of capacity in the width and length of his back, a long keel bone, width of chest and strong legs, placed well apart.

Plymouth Rock males should weigh, cockerels 8 lbs., cocks 9½ lbs. Rhode Island Red males should weigh, cockerels 7½ lbs., cocks 8½ lbs. White Leghorn males should weigh, cockerels 4½ lbs., cocks 5½ lbs.

DRUDGERY OR JOY

"So long as a woman's work presents itself in the light of getting one thousand and ninety-five meals every year, and washing dishes one thousand and ninety-five times—it can be nothing but drudgery.

"It is the task of home economics to show the aim of all that work, as well as to ease its performance. For when we can see that it is done, not merely to satisfy hunger and to keep us in comfort, but that we may present our bodies 'as living sacrifice, holy, acceptable unto God,' then a vision of results is given which lifts the common task into the service of joy. This is what home economics is trying to do."

Helen Louise Johnson.

ALUMNI NOTES

Members of the class of 1923 will be interested to learn that a daughter, Marjorie, was born to Mr. and Mrs. Parkhurst of Essex ave., Gloucester, on July 2, 1926.

Francis Eldredge 1926, of Georgetown has enrolled at Massachusetts

ALFALFA GROWS BETTER IF LAND IS PREPARED IN THE FALL

Now is the time to plan for that alfalfa field, to be sown next spring. In selecting the field, pick one of the most fertile on the farm. It must also be well drained and quite free of weeds, especially if it will be seeded down in the early spring. In selecting the field, take one which was in a cultivated crop this year. Preferably potatoes or corn. Small grain would be a second choice.

Apply half the lime this fall, discing it in before plowing. After plowing, disc in the other half and both sides of the plow depth will be limed. This idea of liming both sides of the land is a new one, but reasonable, since the lime cannot be harrowed in deeper than three to four inches. Alfalfa roots run down deep and are often severely checked as soon as they penetrate beyond the limed area. To be sure, they go beyond the limed area, even when both sides of the land have been treated, but the plow depth is deep enough when limed to feed the plant and gives enough soil for the bacteria to grow in. Lime does not leach away when applied the previous fall and is to the grower's decided advantage, since it begins to sweeten the soil ahead of time.

If manure is plentiful, disc in a good application this fall, onto the plowed land. No appreciable loss will result from this practice. If manure is scarce, harrow in the following mixture per acre just before seeding.

200 lb. nitrate of soda
100 lb. ammonium sulfate
500 lb. acid phosphate
200 lb. potash

In the spring, get on with a harrow as easily as possible. This will start a new crop of weeds. Repeat this two or three times at ten day intervals, and get rid of a few million weeds, and at the same time get a good firm seed bed, which is just as essential as liming.

One reason for applying manure in the fall is that it can be harrowed early next spring with the land, and kill many of the weeds which are sure to get into the land with the manure.

Get in touch with your County Agent at the Essex County Agricultural School, Hathorne, and have him test the soil for acidity.

Agricultural College. He will reside at 21 Woodside ave., Amherst, Mass.

William Lewis '18, formerly assistant manager of the Essex Co-operative Association, is now with the Consolidated Products Company of New Jersey, dealers in poultry feeds and supplies. Mr. Lewis makes his headquarters in Topsfield.

The engagement of Miss Alice M. Coleman, Essex Aggie '25, to Raymond A. Milbury is announced.

LETTER FROM ONE CLUB GIRL TO ANOTHER

Dear Helen:

You must hurry up and come back home! I know that you won't want to, but you must, as Our Club needs you!

There is going to be a Canning Contest at the Topsfield Fair and Our Club has entered it! Every member of the Club must enter three glass jars of vegetables (each one a different vegetable) and two glass jars of different fruits. Of course, you know that there are only five in Our Club and unless you come home we will not be able to exhibit as a Club. So be sure and come home soon! Oh, yes! I almost forgot to tell you! For each member of the winning Club (and that's going to be Our Club) \$2.50 and a blue ribbon is given. There is going to be a Canning Judging Contest, and as you always win a prize at Our Annual Field Day, you should win first place at Topsfield Fair. First prize is \$5.00 So that's two first prizes we want to win! That's why you must come home soon; to get in practice and help us with our Canning.

Yours for a Winning Canning Club.
P. S. Big Boy says that if you don't hurry up and come home he will forget how to dance!

P. S. 2. What do you know—I am going to the Essex County Homemaking School this fall. Gee! Ain't I lucky?

CAMP BAUER

As the season of 1926 comes to a close the boys who have spent the season at Camp Bauer are preparing to return to the classroom work. Camp Bauer was established two years ago and has been successfully carried on as a summer camp for the boys who work on the school farm. The camp is located just back of the old Home-making building and is equipped with electric lights, hot and cold water, shower baths and steam heat.

The boys engage in all kinds of athletics after the day's work is over, the favorites being baseball, swimming and tennis. These activities are arranged and directed by Mr. L. E. Loemker, Camp Counselor for the past summer.

The following boys have been employed on the School farm and garden and many of these were residents of the camp during the past season: Willis Anderson, Danvers; Andrew Bailie, Andover; Roy Frost, North Andover; Paul Bubier, Peter Pasukonis, Rowley; Frank Burbank, Thomas Gould, Roscoe MacKenna, Lynn; Lewis Caron, George Fuller, Salem; Herbert Cartier, Haverhill; Albert Egerton, Beverly; Eric Martin, William Wilson, Methuen; Joseph Scully, Lawrence; Fred Walker and William Brown, Marblehead.

HOME DEMONSTRATION AGENT

DOES YOUR HOME SCORE 100%?

If Essex County homemakers really want to find the weak spots in their homes, we believe this score card, sent us from West Virginia College of Agriculture, will open their eyes.

The Home Demonstration Agent will be glad to give assistance on any subject starred (*), either by a personal visit or by sending Government bulletins.

*1. **Home Grounds:** Surroundings such as will contribute to the welfare of the families, with suitable walks, open shade trees, and massed shrubbery tying down the buildings and screening undesirable views; perennials blooming throughout the growing season. Score 15

*2. **Houses:** Suited to needs of the families; well constructed and painted; equipped with suitable water, light, heating and laundry facilities; sufficient porches; windows and doors screened. Score 15

*3. **Interior Decorating.** Wall finishes simple in design, restful, sanitary; sunshiny colors in dark rooms, duller colors in bright rooms; window draperies in keeping; pictures of real worth, not too numerous. Floor finish inconspicuous, easily kept clean; rugs or carpets plain or of simple patterns blending with other furnishings. Furniture strong, suited to rooms. Score 15

4. **Home Management:** (a) Homemakers all belong to some society or club that meets at least once a month to study home problems. Score 5

(b) In all homes the housework is carefully planned so that all do their proper share of the work. There are no families where the daughters are growing up without learning by experience how to do the various things they will be required to do when they have homes of their own. Score 5

* (c) Incomes budgeted for necessities, savings, education, travel, church, etc. Score 5

* (d) Modern kitchen equipment arranged so worker goes from supplies to working space to stove without retracing steps; tables, sinks, etc., of the right height so as to avoid stooping or reaching up; proper light on working surfaces; according to special grade sheet used in kitchen scoring contest.

* (e) Meals planned to supply energy-giving, body-building, and body-regulating foods, easily prepared and served. Score 10

* (f) Clothing chosen with regard to becomingness, uses, wearing qualities; all garments in keeping, easily made and laundered. Score 10

5. **Companionship:** Members find real companionship at home; meals happy family affairs; community mat-

WHAT THE CHILDREN'S CLOTHES PROJECT MEANT TO ONE MOTHER

To me the lessons I have received in the Children's Clothes Project have meant a gaining of confidence in my ability to do things which I had previously been afraid to undertake, thinking that only a professional could do them successfully.

I had undertaken bound buttonholes before joining the class, and when they were well pressed, and the garment buttoned up, they didn't look too bad. However, they did need to be buttoned up to cover defects. The way we were taught to do them in class is very simple, and they are an ornament to any garment.

I had attempted occasionally to use my machine attachments, but soon gave up the undertaking as more bother than help. With some one to actually show me, instead of trying to follow the instructions in a book, I soon found my attachments were real aids and time-savers.

The many pretty finishes and stitches were explained and soon enabled me to produce garments for my daughters that had the appearance of the high priced dresses in the stores. The method of making a welt pocket was a revelation to me.

I believe that the course is one that is valuable, especially to young mothers. I wish that I might have had the knowledge which I have received through the lessons, when my children were small. It would have meant many dollars saved, as well as material and time. It also would have meant that my children would have had good looking clothes, instead of those which were distinctly home made.

I have been able to assist my friends by showing them how to do things that were bothering them, and I am able to impart to my daughters instructions which will, when the time comes for them to assume their duties as wives and mothers, make them better equipped to meet their problems.

MRS. WALTER H. EATON,
15 Belmont ave., Haverhill, Mass.

ters often discussed around the family circle. Score 10

Total Score possible 100
Total Score earned ()

Should you score your home, as is suggested on this page, the Home Demonstration Agent would be very glad to hear about some of the scores.

Date
I would like suggestions for the rearranging of my kitchen.

Name
Address

TOWN CHAIRMEN BUSY MAKING PLANS FOR EXTENSION CLASSES

The Home Demonstration Agent appreciates the promptness with which the Town Chairmen have sent to her office their applications for fall classes. Already over thirty communities have decided their needs for the coming year. Classes will be formed in adult Dressmaking, Children's Clothes, Study of Foods, Household Accounts, Kitchen Improvement, and Home Nursing.

The work accomplished last year by local leaders in the Nutrition and Children's Clothes Project proved a great success and similar work will be done this year. Mrs. John Everett, nutrition leader from North Andover, and Mrs. Percy Morgan of Groveland, leader in the Children's Clothes Project, attended a conference held at Massachusetts Agricultural College, Amherst, for the purpose of receiving these projects. Young mothers will be glad to know that while they are being taught the making of children's clothes, suggestions will be given at the same time regarding the food for young children, for we realize that a sound body is more to be desired than fine clothes. We hope you will be sure to read the report which Mrs. Eaton of Haverhill gives of the assistance which she received as a member of the Children's Clothes project. This report was given by Mrs. Eaton at a meeting of the advisory council and town chairmen.

This year we would like to see a greater interest in improving home conditions especially the kitchen, which is your workshop. We feel that many a homemaker could profitably spend four or five days in planning how she could easily save herself many steps, a tired back, and have more cheerful and attractive surroundings.

If you are planning to make improvements in your kitchen this year, the Home Demonstration Agent would like to visit you before the chances are made, and then next spring we will plan a "kitchen tour" and visit each other's improved kitchens. Be sure and see her if you want to become a member of a kitchen improvement group, or if, as an individual, you would like suggestions in improving your own kitchen.

If you would like a visit from the Home Demonstration Agent, just fill out the coupon below and mail it to the Home Demonstration Agent, Essex County Agricultural School, Haverhill, Mass.

4-H CLUBS WILL EXHIBIT AT TOPSFIELD

Judging Contests for Club Members New Feature

The new building at Topsfield Fair known as the Vegetable building, but which in reality is the 4-H Club building, will contain all 4-H Club exhibits except the Poultry and Dairy exhibitions.

There are two new features on the 4-H Club program this year. The Canning Judging Contest and the Clothing Judging Contest. Both these contests will be held Saturday at 10 o'clock. The first prize of each contest will be \$5.00, and only 4-H Club members will be eligible.

The Dairy Club exhibition will be in a tent by itself! Watch for the signs!

The Newbury Dairy Club will have seven calves at the Fair. Five of them will be Ayrshires and the other two Holsteins. The bull calf of Si Little's will lead this herd. This calf is a pure bred registered Ayrshire which was secured from Massachusetts Agricultural College, Amherst.

* * * *

The Garden Club Exhibition Contest promises to be a good one this year. I am almost sure of this because two Clubs from West Newbury will have exhibitions. And everybody knows that when two Clubs in the same town enter the same contest—

* * * *

4-H Clubs—Head, Heart, Health and Hands.

* * * *

I know a little pussy, it's fur is silver gray.

It lives down in the meadow; it will never run away.

It will always be a pussy; it'll never be a cat;

Its name is PUSSY WILLOW—now what do you think of that!

* * * *

Now folks, if you don't believe the above verse, ask some 4-H Club member that attended our annual Field Day.

* * * *

4-H Clubs—Head, Heart, Health and Hands.

* * * *

Andover people! Attention!

Look for the birds entered in the 4-H Poultry show by Charles Nason and Ben Dimlich. Both pens of birds will be worthy of your attention.

All 4-H Club Contests will be held Saturday morning, September 18, beginning at 10 o'clock. This means

R. E. LOEMKER COUNSELOR AT CAMP BAUER WRITES OF SEASON JUST CLOSING

"Working for the County." It has its ups and downs, as the students will tell you who have been working out their projects at the Essex County Agricultural School this summer. But for the thirteen who camped at "The Palace," otherwise Camp Bauer, the summer has been a happy one.

Activity at the camp has been varied this summer, owing to the diverse accomplishments to which its occupants modestly plead guilty. But at least two activities have proven a source of great happiness to all thirteen—the "double decker" beds in the Palace and Mrs. Elliott's bountiful meals. A battery of five alarm clocks has sometimes proven inadequate to get us out on time in the morning, but no such devices are needed to bring everyone up to the old Home-making building at "chow" time.

Athletic activities have not been neglected. Early in the season the camp challenged the instructors to a baseball game, but was defeated. We are planning revenge in a return game soon to be played. Several games have been played with the prison camp. However, more interest has been centered this summer on tennis, practically all of the inhabitants of the "Palace" being enthusiasts. A tennis tournament is still in progress. "King's Pool" and a new swimming hole at "the red bridge"

have seen many of our number on every hot evening of the summer. A punching bag added to our equipment by one of the students has proven an effective outlet for energy not consumed in daily labor, while the magazines and games in "the Castle," a radio, and the piano in the assembly provide entertainment in the hours after dark.

Early in the summer the boys improved the camp by adding to it a long piazza which has since become a popular place to sit and exchange opinions and confidences.

So has passed a summer full of activity. Living together has taught us to understand and to respect each other's view points. Some of the boys are already planning to come back next summer, when new friendships and enthusiasms will be added to the old.

that all those who are to enter Canning, Clothing, and Poultry Contests will see either Miss Parker or Mr. Ewing sometime Saturday morning. If there are enough entries there will be a Stock Judging Contest.

* * * *

4-H Clubs—Head, Heart, Health and Hands.

FRESHMAN PROJECT TRIP

Students Visit Projects of Classmates

Under the guidance of Instructor Ellery E. Metcalf, a group of freshmen students recently made a very interesting series of calls on each others projects. Thought some who had planned to go found it impossible at the last minute to get away because of the pressure of work, there was a group of fifteen who met at the School in the early forenoon.

The first stop was made at the School market garden where some of the boys who have been operating ownership projects at home had an opportunity to observe what some of their classmates had been doing on a commercial plant of considerable size. The succession and companion systems of cropping as well as other points received considerable attention here.

From the School garden the group proceeded by truck to the town of Rowley where the projects of Arthur Gordon, Maynard Haley and Nathan Hale were looked over. The latter two are places where the boys are employed while Gordon's project is an ownership one and was found in splendid condition. Gordon has kept a fine crop record as have some of the others and a point which aroused interest among the students throughout the day was the comparison of the number of days it took to grow crops to maturity in various parts of the county and under the management and care of the different boys.

At West Boxford the group showed great interest in the beautiful farm of John Chadwick where John Kelly of Groveland has been at work and also at the Meredith Guernsey Farms in Topsfield where Irving Jaquith of Lynn has his project.

Irving Johnson of Rowley has his project on the farm of T. P. Driver in Georgetown. Here the boys' interest was caught by the novel arrangements in the new poultry house and by the two tractors which Irving has been working with. A short call was also made at Frank Cahill's home project next door.

The last call was at the Low estate on North st., Danvers, where Joseph Finocchio has been employed in vegetable gardening and dairy work. Joseph has a crop record of over 50 plantings which has been kept faithfully all summer. The fine condition of the crops here was a testimony to the thorough careful work that Joseph has done this summer.

The trip met with enthusiastic response from the students and all felt well repaid because of the opportunity for comparisons of the types of work and the opportunities offered for learning new facts about their own jobs.

H. A. M.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 8

HATHORNE, MASS., JANUARY, 1927

No. 1

NEW CELERY CULTURE

Method Proves Successful at the School Garden

The increased demand for celery has brought to light a system which has been tried before but never put into practice to any extent. By using the "New Celery Culture System," success and profit can be realized, provided three facts are kept in mind—namely, plenty of plant food, plenty of water, and plenty of dusting or spraying should be practiced to control blight.

Preparation of Land

An application of 40 tons of manure per acre is none too little for best results in this system. If this amount cannot be obtained, apply 20 tons per acre and add a ton of high grade fertilizer at time of preparation of land for planting. A top dressing of 300 pounds per acre of nitrate of soda applied to the seedlings have become established in the soil should be made. An application of a ton of lime per acre, applied after the soil has been plowed and then disc harrowed, will prove beneficial to most crops of celery.

Setting Plants

Set plants in blocks of six rows each and leave three feet between each block to allow walking and working space. The plants should be set six (6) inches in the rows and the rows should be six (6) inches apart. Thus it will be seen that four times as many plants can be set to an acre in this new system over the old single row system, but the yields will be four times as large and with less labor as the boards which are used to bleach the celery in the single row system will bleach the six rows in this new system.

Watering

A slight trench or ditch run down each side of the block of rows will afford a place to run water and thus supply water to the plants without getting the plant foliage wet which encourages the spread of blight.

Blight Control

Frequent applications of Bordeaux mixture, either dust or spray, should be made to aid in the control of blight. These should be made every two weeks or so according to the season up to the time of boarding the celery.

This "New Celery Culture System" has been tried out at the School Market Garden for several years and plans

are underway to increase the amount of celery grown under this system this coming season. If you are interested why not visit the School gardens and see the system in practice and ask questions of the instructors in charge?

ESSEX COUNTY FARMERS' DAY AT HATHORNE

WEDNESDAY, MARCH 9th

Exhibits of Farm Implements
and Machinery.

Commercial and Educational Dis-
plays.

Fine Speaking and Sectional
Meetings.

An all day Program of interest
to Farmers and Homemakers.

COURSE IN POULTRY FOR ADULTS PROVES SUCCESSFUL

For the first time in the history of the school, an evening course in Poultry Culture was conducted for adults. There is much interest in this subject around the county, and the popularity of the course is attested by the fact that there were twice as many applicants for enrollment, as could be accommodated, which was twenty people. The class met every Tuesday and Thursday evening at the poultry class rooms in the old school building where fine facilities were available for such work; the main poultry plant being close by for practical work. The course of twenty-two lessons, all of a practical nature, was under the direction of Poultry Instructor, Albert W. Doolittle, Profs. Graham and Monahan from Amherst, and others.

The subjects covered were as follows: Starting the Poultry Business, Killing and Dressing, Culling and Selection of Stock, Breeds, Selection of a Farm, Feeds, Incubation, Anatomy and Disease, Care of Breeding Stock, Brooding Chicks, Winter Management of the Layers, Poultry House Construction, Summer Management of Laying and Growing Stock, Accounts and Records.

All those enrolled were interested in the poultry business from a practical standpoint, it being a part or entirely their livelihood, and the course was designed to be of practical value to them.

USE MORE ALFALFA

Cheapest Hay Not Always the Best For Dairymen

More good judgment is required to purchase hay for dairy cows than the purchase of any other feeds. In ordering a bag of bran or corn meal, from the dealer, the dairy man can usually tell what quality product he will get, but when he orders hay, he is never sure of the quality. Always see the hay before purchasing, and see to it that the price is right for the quality. Many times, if you compare the quality and price of hays, you will find, in many cases, that the most expensive hay is the cheapest in the end.

Analysis by comparison of quality and price will suffice to clear up the problem.

Suppose a dealer offered you a mixed clover hay for \$28.00. You examined it and found that it contained 20% clover of fair quality, 40% Timothy of fair quality and 40% Red Top of fair quality. Another dealer offered you a second crop of alfalfa of good color, well cured, at \$36.00 per ton. From which of the two dealers would you buy your hay?

Mixed clover hay of fair quality has the following analysis: 31.6 pounds total digestible nutrients, including three pounds of digestible protein in one hundred pounds of hay. Alfalfa hay of good quality has the following analysis: 51.6 pounds of total digestible nutrients, including 10.6 pounds of digestible protein in one hundred pounds of hay.

As a general rule good quality alfalfa is worth about \$5.00 more per ton for feeding dairy cattle than A No. 1 mixed clover hay. That is, if alfalfa is worth \$35.00, mixed clover hay is worth about \$30.00. Good judgment in buying hay is needed if you are going to cut the cost of production.

RECENT BOOKS ADDED TO THE SCHOOL LIBRARY

Through the generosity of former Trustee Justin E. Varney of Lawrence, the School Library has acquired "Wild Flowers of New York." The work is in two volumes and is a most valuable accession.

The Library has also acquired by a gift to Director Smith the following volumes: "Small Fruits of N. Y.," "Pears of New York," "Sturtevant's Notes on Edible Plants."

Essex Farmer and Home Maker

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

A BI-MONTHLY PUBLICATION SUBSCRIPTION FREE

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Entered as second class matter, May 28, 1913, at the post office at Hathorne, Mass., under the act of August 24, 1912.

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CALENDAR

January 28—Second term ends in the Agricultural Department.

February 11—Junior Prom, also basketball, Essex Aggie vs. Norfolk, at Hathorne.

February 16—Chebacco Pomona Grange Meeting at the School.

March 9—Thirteenth Annual Farmers' Day at Hathorne.

FORMER TRUSTEE DIES

In the death of Justin E. Varney, of Lawrence, the School loses one of its strongest long time friends. Mr. Varney was appointed in 1912 by the Governor to the original Board of Trustees and was reappointed continuously and served until he resigned in January, 1926. Always prompt in attendance and active in working out policies, many of them being studied out and evolved for the first time, Mr. Varney gave unstintingly of time and thought to develop the plans under which the School is now operating. He was always strong in the belief of the need of this kind of training and of the possibilities in agriculture and homemaking. The School benefited by many gifts of various kinds from the hands of Mr. Varney, the last being a gift in December, 1926 of valuable books for the library.

ANNUAL FARMERS' DAY

The thirteenth Annual Farmers' Day will be held at the School on Wednesday, March 9.

The value of such a day to the people of Essex County cannot be overestimated. It offers an excellent opportunity for farmers and homemakers to get acquainted with the most recent developments in their par-

ticular field of activities. In the past the school management has always secured expert authorities in many different fields of endeavor, and this year will be no exception. The usual exhibit of farm implements and machinery, trade and educational displays and many other attractions are being arranged. The Director of the School, members of the Staff and Extension Service are now working on the program, and as details are worked out, they will be published in the daily press.

THE ALUMNI

In the near future a letter will go forth to every alumnus of the school, asking for certain information in regard to their present whereabouts and occupation.

We are requesting this information in order to keep our graduate records up-to-date, and we hope for a ready response from every alumnus of the School.

VEGETABLE GARDEN NOTES

The vegetable section of the School greenhouse is now largely devoted to the growing of lettuce, cucumbers and tomatoes. In about five weeks the tomato crop will be at its height and visitors may study the results of the three different varieties grown.

The vegetable division will again attend to the raising of seedling plants for growers in this section, if seed is furnished. Twenty-five cents per flat will be charged to cover cost of labor.

SCHOOL NOTES

The Assembly Committee has planned a speaking contest to be held on February 4. There will be eight speakers, four boys and four girls, representing the four different classes. A committee of judges will select the three best speakers.

The committee has also planned for a program to be held the latter part of February, at which original essays will be given.

The second term in the Agricultural Department will close on January 28. This marks the half way period in the work of the school year.

VALUABLE MAGAZINE

A new magazine of value to vegetable growers, called the "American Produce Grower," is now published by the International Trade Press, Inc., 53 W. Jackson Blvd., Chicago. The January number contains many valuable articles, contributed by experts in their particular field from all over the United States. The editor is Mr. H. F. Thompson, who is considered an authority on market garden problems. The magazine is very reasonable in price; being fifty cents a year, one dollar for three years.

1927 VARSITY BASKETBALL SCHEDULE

Wed. Jan. 5—Johnson at Hathorne. Score 13-16.
Fri. Jan. 7—At Swampscott. Score 14-28.
Wed. Jan. 12—Salem, N. H. at Hathorne. Score 28-12.
Fri. Jan. 14—At Salem, N. H. Score 13-10
Wed. Jan. 19—Alumni. Score 26-29.
Fri. Jan. 21—Bristol Aggies at Hathorne. Score 17-24.
Wed. Jan. 26—Methuen at Hathorne. Fri. Jan. 28—Norfolk Aggies at Walpole. Wed. Feb. 2—Pending.
Fri. Feb. 4—Bristol Aggies at Segreganset. Wed. Feb. 9—At Haverhill.
Fri. Feb. 11—Norfolk Aggies at Hathorne (Junior Prom.) Wed. Feb. 16—Swampscott at Hathorne. Fri. Feb. 18—At Methuen. Mon. Feb. 21—Johnson at North Andover. Fri. Feb. 25—Pending.

HOCKEY

The hockey team has played three games so far this season. Aggie lost to Beverly on the home rink 3-2, and won from Swampscott, 3-1. A game played with Danvers resulted in a 0-0 score.

WEATHER SUMMARY FOR 1926

Readers of the Farmer and Home-maker who have been following the weather notes published from time to time will perhaps be interested in a brief summary for the past year. Data for each month and for the year, more complete than space permits publishing here, is available at the school and will be sent to anyone who sends in a request for it.

The total rainfall for the year was about 10 inches below normal as recorded here. This is much lower than the Boston figures for 1926, and lower even than figures in easterly parts of the country. In the middle of the year a new gauge was placed in use at the school, but this will not account for the difference wholly, for in one storm alone in May there was but a little rain at school when nearly two inches fell within a few miles of the school. It has been a dry year at the school farm.

Hottest day of year—July 22nd, 101 degrees; coldest day of year, Feb. 9th, 4 below; average daily temperature, 45.70 degrees; total rainfall, 33.09 inches; average rel. hum. 8 a. m., 75.6 percent; rain or snow on 119 days; clear days, 112; partly cloudy, 196; days no sun, 57; total hours sun, 2637 approximate; total possible, 4466; percent sunshine, 59.0.



EXTENSION SERVICE



DAIRYMEN OF ESSEX COUNTY TO TEST COWS

Essex County will have a Cow Test Association of its own by February 1st, if all goes well. Only a few more members are needed to fill the quota of 26 herds. A competent tester has applied for the position.

By becoming a member of a cow test association, the dairyman has the best possible check on each cow, with the production and the cost of producing as well. The tester calls at each farm once a month; is there for an evening and morning milking. During his stay, he weighs and tests the milk given by each cow, and weighs the feed she eats to produce it.

He keeps all figures in an account book which remains with each herd owner.

Any one wishing to belong and receive the benefits of this service is urged to get in communication with County Agent Finemann at once, since only 26 herds can be accommodated.

NEW SERVICE FOR ESSEX COUNTY POULTRYMEN

Something new in Poultry work is being tried in Essex County by the Extension Service. Regular, timely letters giving the best and latest methods and information, are issued to all poultrymen who would like them. The material is supplied by Professor Monahan of Amherst, Mr. Doolittle and Mr. Morse of the Poultry Department at the School and County Agent Finemann. The first letter on "Selection and Mating of Breeders" has been published and sent to several hundred poultrymen. Other letters will be mailed soon, and will fully cover Incubation, Brooding, Care and Feeding of Chicks, Summer Management, green feed, etc.

To receive this valuable service free, notify County Agent Finemann, Hathorne, Mass.

HOME ECONOMICS STANDS FOR

"The ideal home life of today unhampered by the traditions of the past.

"The utilization of the resources of modern science to improve the home life.

"The freedom of the home from the dominance of things, and their due subordination to ideals.

"That simplicity in material surroundings which will free the spirit for the more important and permanent interests of the home and of society."

ELLEN H. RICHARDS.

NEW YEAR'S MESSAGE BY PRESIDENT COOLIDGE TO FOUR-H CLUB MEMBERS

President Calvin Coolidge, a farmer boy himself, sent a New Year greeting to the 600,000 members of Four-H clubs in the United States and the Boy Scouts of approximately the same number, as follows:

"As we go into the new year, I send you my greetings and best wishes for health and happiness in the coming twelve months.

"In my holiday message a year ago I pointed out the many advantages of membership in associations such as yours. If we should try to express their principles in a single word, that word, it seems to me, would be 'helpfulness.' You help others, and you help yourself by helping others.

"I congratulate you on the accomplishments of 1926, and you know you will have abundant opportunities for usefulness in 1927. We get happiness from doing our duty, further happiness from doing a little more than is necessary, and from doing things as near right as we can.

"Our communities and our country are the better because of what you boys and girls are, what you do, and what you will mean to our social and economic life as the men and women of the future."

ALUMNI ASSOCIATION

At the annual business meeting of the Essex Aggie Alumni Association the following officers were elected:—

Oliver Sargent, 1922, President
20½ Newcomb St., Haverhill.
Gertrude Smith, 1924, Vice President
Methuen.
Eric Bergstrom, 1923, Vice President
Lynn.

Robert B. Ewing, 1923, Sec. and Treas.
Middletown.

These officers, with three other members, make up the advisory committee of the Alumni Association.

GREEN AND WHITE

The 1927 "Green and White" will make its appearance soon. This publication will contain the usual departments and enumerate the various School activities of the School year 1926-1927. A large section of the book will be devoted to the whereabouts and occupations of the alumni.

Every graduate will be interested in the 1927 issue. Address Robert Sproull, Alumni Editor at the School, enclosing 50 cents for your copy.

Mabel Batchelder, Lynn, has established a hairdressing parlor in Lynn.

HOME DEMONSTRATION AGENT Figures From Annual Report and What We May Learn From Them

Much time is given during the month of December compiling necessary statistics which make up our Annual Report. One sometimes asks "of what real value is this Annual Report to the Extension worker. Is it a help in planning for another year's work?"

Let us look at some of the figures taken from the report of the Home Demonstration Agent and see if they suggest changes which could be profitably made in promoting Extension work for the coming year.

Of the sixty communities in Essex County where Extension work should be conducted, forty communities and sixty groups of homemakers have carried definite Extension projects during the year 1926.

Of the 770 women who have been members of Extension groups, 357 have attended classes in Adult's and Children's Clothing, 177 Millinery, 164 Nutrition, 74 Home Nursing, while no community has carried the Kitchen Improvement or Household Accounts projects.

These figures show an increasing interest in Nutrition and good food habits during the past year, and home nursing well started in five communities. This is largely due to the fine response from women willing to act as local leaders.

We would like our annual report of 1927 to show more communities reached, still greater interest in nutrition and more mothers interested in home nursing and home furnishing.

These projects will broaden the vision of Essex County homemakers and the study of them will tend to give a more satisfying home life.

ALUMNI ACTIVITIES

Alfred Bryer is herdsman on the William Wood farm in Andover.

James F. Duncan is park superintendent in Gloucester.

James Skinner of Marblehead is building an addition to his greenhouse.

Francis MacLaughlin is manager of the Collidge estate in Portsmouth, N. H.

Robert Lewis is employed by the Davy Tree Expert Company.

Theodore MacNichol is operating his own poultry plant in West Peabody.

Gladys Hulsman, Lynn, and Gertrude James, Beverly, are training in the Beverly hospital.

Evelyn Rice, Salem, is assistant superintendent and dietitian in a children's home in N. Y. City.



CLASS OF 1926

Top Row: Evans, Nowell, Morse, Buhl, Rippon, Bodwell, Reed, Ward, Wentworth.—Second Row: Nickerson, Martin, MacKenna, Addison, Sevigny, Kochakian, Leighton, Newhall, Rogers.—Third Row: Dodge, Butler, Vaughan, Cogswell, D. Rogers, Smith, Grotto, Stickney, Robinson, Eldridge.—Fourth Row: Misses Sayward, Greenleaf, Sewell, Pizzello, Boardman, Mattheson, Pilkington, Henderson, Littlefield, Perkins, Shaw, Richardson.—Fifth Row: Scobey, Sullivan, Ham, Goodwin, Brooks, Hall, Holt, Erickson, Hawks, Parisi.

FEMININE FASHIONS OF TODAY BECOMING STANDARDIZED

Simplicity in design has become so permanent a part of the fashions of today that a new season can no longer bring the sweeping changes that were once expected. Feminine fashions are becoming more and more standardized.

Selection of fabric has become of greater importance than selection of design. It is self-evident that certain styles call for certain types of materials; yet, some of the greatest mistakes that are made in home dress-making lie in combining wrongly the fabric with the design. Styles cut on straight, narrow, sheath lines call for a fine texture, while those introducing soft fullness require soft bodyless materials if they are to fall in straight lines.

With the seasons changing fashions, the beautiful silks of varied colors and textures are being shown in the smart shops. The use of diagonal lines, curved lines, and of straight lines in tucks, seams and pleats give variety to the simple design.

The low waist line, placed at the hips is often accented by means of a swathed girdle. The square and V neck lines are smartest, but round neck lines are seen on many new models.

RECENT PUBLICATION

For those interested in the problems of the rural church, the book entitled "Our Templed Hills," by Ralph A. Felton is recommended.

FRUIT JUDGING TEAM WINS SECOND PLACE AT WORCESTER

The Essex County Agricultural School sent a fruit judging team to the Union Agricultural meeting in Worcester on January 5th for the purpose of participating in a fruit judging contest. There were about sixty contestants, from all parts of the state, all being members of agricultural schools or agricultural departments in high schools. As a team the Essex boys placed second, and secured the fifth individual prize. The team consisted of Peter Pasukonis of Rowley who won fifth prize, Thomas Gould of Lynn, and Russell Ray of West Newbury. Horace Shute of West Newbury was alternate.

SCHOOL ORCHESTRA PROGRESSING UNDER DIRECTION OF INSTRUCTOR WOODS

The Essex County Agricultural School Orchestra consists of seven members with the following instrumentation: Three violins, two saxophones, cornet and piano. The orchestra plays only the better class of music, rehearsing once each week. So far this year music has been rendered at several school functions, including the Christmas party and graduation. The members are as follows: Grace Coleman of Merrimac, Harry Lear of Swampscott, and Philip Armitage of Lynn, violinists; Annie Dickinson of Lawrence, saxophonist; Robert Moulton of West Peabody, cornetist, and Nancy Perkins of Newburyport, pianist.

SELECTION OF TYPE OF EDUCATION IMPORTANT

The type of education is today the serious problem which is confronting the parents of many girls who have finished the grammar grades.

It is not a question of continued education and training, but of the type. Some girls fit perfectly into the Academic High School with its curriculum of higher mathematics, languages and science, and with them there is no question. College will probably follow. Others find the commercial course appeals to them with its ultimate office work. But what about the girl who is motor minded; the girl who wants to cook and sew, to whom dishwashing is no bugbear, and who has a taste for personal and home decorating? Such a girl finds the high school curriculum a terrible burden, a fearsome thing which is sapping her courage and her health.

Fortunately, educators have recognized this, and vocational and trade schools have been organized where a girl may learn the technique of the subjects in which she is interested, and her mind and hand may be trained along lines which will develop, instead of retard, her mental growth.

The Homemaking Department of the Essex County Agricultural School is carrying on this work and a visitor to the School can see by the bright, happy faces of the students the good results that are being obtained by girls who are being given an education along lines in which nature intended them to develop.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 8

HATHORNE, MASS., JUNE 1927.

No. 2

FRUITS, OLD AND NEW ESSEX COUNTY PROMINENT IN FRUIT GROWING

In the years immediately following 1630, Governor John Endecott through his own personal initiative specialized in horticulture and fruit growing in this region. He established a diversified farm in connection with his country home in a portion of Salem which is now a part of Danvers. With a far

ment thoughtful fruit men are wondering if the Baldwin apple is showing signs of weakness which may eventually cause it to be supplanted. Many even think that the McIntosh apple is already doing this work. The progressive grower and the intelligent consumer have much in common when



Orchard and Herd of One of Our Graduates

sighted vision he brought trees, plants and seeds together with skilled assistants from the old world. To this he and his successors added the selection and improvement of the best native types of fruits and plants.

The succeeding generations have found a soil and climate well adapted to a wide range of kinds and varieties of fruits. A map arranged to show the point of origin of various varieties would make the eastern United States a well marked section. In the later years we have seen the rise and extension of the cultivation of certain varieties in limited areas. There is no more favored section than Essex County for the production of high quality fruit combined with ample yields. The discerning consumer has learned that fruit of the highest quality can be produced right here on our nearby farms. One of the best proofs of this statement is seen in the fact that local and roadside markets selling fruit from local farms are meeting with increasing sales.

Varieties however are not permanent. The average duration of some of the small fruits extends over only a decade or two. This is especially true of the peach. Even varieties as permanent as the Baldwin apple, the Bartlett pear and the Concord grape are threatened a loss of supremacy in their particular fields. At this mo-

ment seeking new fruits of higher quality. Undoubtedly attractive appearance in the past has been given more weight than high quality.

During the past century most of the new varieties have resulted from the finding of outstanding chance seedlings. Conditions are, however, now changing rapidly. The plant men, following the studies and lead of the animal men, are scientifically producing varieties which are attracting widespread interest. There will be a need for another group of men to test the adaptability of these varieties to definite regions. We shall need to know a great deal more about their behavior under different conditions of soil, climate, fertilization and cultivation. There will be further need to know just how these varieties will be accepted by the customer. Naturally there will be small inducement for nurserymen to propagate and disseminate these varieties because the sale for some years will be relatively limited. With the above purpose in mind the Trustees and Advisory Boards of this School have outlined and undertaken a plan by which this work will be done in the interests of farmers, householders and consumers. In a later number of this series it is proposed to tell you just how the School is attempting to serve the above interests.

AGRICULTURAL BOARDS MEET AT "ESSEX AGGIE"

The members of the Department of Agriculture and the old State Board of Agriculture will hold a two day conference in Essex County on June 9th and 10th. During this time visits will be made to outstanding farms and noteworthy places in horticulture.

They will be the guests of the Trustees of the Essex County Agricultural School on Thursday, June 9th at which time they will make a very thorough examination of the farm and buildings of the School studying the projects which are underway, noting the progress of some long standing plans and familiarizing themselves with the facilities for instructing boys in the various projects of agriculture and the girls in homemaking. During the balance of the day, Thursday, and on Friday, they will visit leading farms together with a few estates where some particularly interesting features are to be seen. They will have an opportunity to see several notable projects conducted by graduates of the School and form a picture as to the probable influence which this School is casting on the agriculture of the region.

The members will hold a meeting at the Hotel Hawthorne, Salem, on Thursday evening at which time speakers of note will address them. This is the eighth meeting of its kind and affords an opportunity for a group of men who have been shaping their plans and policies of agriculture in the state to get together, exchange ideas and do some very important and constructive work.

EVENTS AT THE SCHOOL IN JUNE

BETTER HOMES DAY EXTENSION GROUPS

Wednesday, June 8

I-H CLUB FIELD DAY

Saturday, June 11

ANNUAL PARENTS' DAY of the HOMEMAKING DEPARTMENT Wednesday, June 15

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H. A. Mostrom W. B. Moore

CALENDAR

- June 8—Better Homes Day at School.
June 9-10—Annual Meeting State Dept. Agriculture and old State Board of Agriculture at Hathorne and Salem.
June 11—4-H Club Field Day at School.
June 15—Parents' Day, Homemaking Dept. at School.
July 20—Chebacco Pomona Field Day at School.
July 20-21—Annual Poultry Conference at M. A. C. at Amherst.
July 24-30—International Poultry Conference at Ottawa, Canada.
July 26-29—Annual Farm and Home Week, M. A. C. at Amherst.
Aug. 2—Danvers Grange Meeting and Picnic Supper at School.
Aug. 2-5—Summer Conference of Agri'l Instructors at Bristol County School.
Aug. 3—Market Gardeners' Field Day at Station at Waltham.
Aug. 10—Essex Pomona Field Meeting at School.
Sept. 6—Opening Day, Homemaking Dept.
Sept. 6—Opening Day, New Students, Agri'l Dept.
Sept. 26—Opening Day, Advanced Students, Agri'l Dept.
Oct. 28—Annual Science Day at School.

OUR FUTURE

The School is about to complete one of the most successful years of its existence. Students are leaving daily to take up their valuable summer projects at which they apply and demonstrate to the visiting teachers that the instruction they have received has been well worth while and can be put to effective use.

Of the many activities of this School the instruction of boys and

girls in the undergraduate work is of first importance and should take precedence over everything else. The authorities have been carrying on, this spring, a constructive and far-reaching campaign to acquaint citizens with the opportunities which are afforded here for practical education and training. We need the help of every broadminded citizen in this work. Building for the future, the results of which cannot be measured by any immediate or instantaneous return, a special effort is being made to have various groups of citizens make a personal visit and inspection of the School buildings, farm and equipment.

Our Homemaking Department is especially well prepared now to receive a larger entering class and everything looks toward the giving of an increasingly valuable course of instruction in this department.

A study of the work of graduates, non-graduates and undergraduates convinces us that the School is playing a very important part in the agriculture of this region. In a county which has as diversified an agricultural program as Essex County has, it is worthy of note that we have members of the above three groups taking part as either owners or employed in nearly every branch of agriculture. Is it asking too much to expect that in a relatively short time men who have been with the School will be conducting a major proportion of the agricultural work of the County?

STAFF CHANGES

Educational institutions like this School are constantly undergoing changes in the personnel. It is a fact that business and commercial organizations are always making tempting bids for the services of outstanding workers. It is a pity that those in authority often cannot meet the competition of business.

We announce with much regret that we have received the resignations of Instructor Krasker, who has served us for five years in the Science Division and that of the County Agricultural Agent Fienemann, who has been with us for eighteen months. Both men have rendered valuable service to the School and the citizens. We wish them the best of success in their larger fields of opportunity and usefulness.

We also chronicle the resignation of Miss Hunting of the Homemaking Department. She leaves us to continue her studies at the Framingham Normal School. Miss Hunting has been a member of the Faculty for four years and will take with her the kindest wishes of the entire staff.

NEW AGENT APPOINTED

After the study of a large field of candidates the Trustees appointed, on May 18th, Francis C. Smith as County Agricultural Agent. Mr. Smith has accepted the appointment and will report for duty at once.

The new County Agent graduated from the College of Agriculture, Cornell University in 1913. He was born on a farm and has been connected with agricultural work through his college experience and since. He has had experience as agent in two New York counties and in the latter position was County Agent for Essex County, New York. He has also been connected with the staff of the New York College of Agriculture, Cornell, as farm crop specialist. He is especially strong in farm management, field crops, soils work and dairying, but has had a general experience in other lines of farm activities.

In Essex County, N. Y. he was particularly active in the bovine tuberculosis eradication campaign and should be very helpful and constructive in facing some problems which are bound to arise in this section during the next few years.

COUNTY AGENT RESIGNS

April 20, 1927.

To the Trustees of the Essex County Agri'l. School
Gentlemen:

It is with regret that I tender you this, my formal resignation to take effect one month from today.

An opportunity has been given me to enter a different field of endeavor with such a future that it becomes imperative to accept.

I wish to express my sincere appreciation to you, gentlemen, for the interest you have taken in Extension Work and the splendid support given me by Director Smith, as well.

Very sincerely yours,
(Signed) H. W. FIENEMANN,
County Agricultural Agent.

FARM AND HOME WEEK

The ninth annual Farm and Home Week for Massachusetts farmers comes at the Mass. Agricultural College on July 26-29 inclusive. Every effort is made by the various departments of the college to make the time spent here by the people of the State of real educational value. The best specialists and research men in the east, and often in the country, are brought here to give us the latest information, thus making it possible for us to keep up to date in the new developments in our field.

HOME DEMONSTRATION AGENT

EXTENSION GROUPS MEET AT HATHORNE

Better Homes Day, Wednesday, June 8
The Women's Section of the Extension Service, organized under the leadership of the County Home Demonstration Agent has completed a successful year, the results of which are shown at the fourth annual Better Homes Day.

The work with the adult women of the country is increasing each year. Miss Crawford, with her assistants, has carried on work in clothing, nutrition, and home management with over 800 women in Essex County. Fifty-five groups were organized under local chairmen and work in the various projects carried out during the year has been very successful.

Better Homes Day was started four years ago in this county by the present Home Demonstration Agent, and the purpose of it is to bring these groups together, and to exhibit and explain their work to other interested homemakers.

The morning program begins at 10.30. A playlet will be given by a group of women from Amesbury. They will show, in a unique way, the work which they did in the Home Nursing classes under the direction of Miss Lucinda Bousley, R. N. The following women will take part: Mrs. Margaret Manning, Mrs. Ellen Reardon, Mrs. Julia Burke, Mrs. Sarah Toggerson, Miss Hannah Hanley, Mrs. Dorothy Fowler, Mrs. Edith Barr and Mrs. Ethel Spofford.

A group of Salem women under the leadership of Mrs. Carl Daley will conduct a Style Show, illustrating costumes in vogue twenty years ago, and in contrast to them, dresses of today will be shown by members of the Extension classes. Mrs. Edith Gray Symonds, soloist from Salem, will take part in costume.

The afternoon program begins at 1.45 with community singing, led by a group of women from Andover.

Mrs. Annette T. Herr from the State Extension Department and Miss Caroline Nourse of the Department of Education will speak. The main speaker of the afternoon will be Mrs. Elizabeth McDonald of Boston University. She has a message for all homemakers, which Essex County women will not want to miss. Mrs. McDonald is one of the outstanding women in Home Economics in the country.

In the exhibit section, a group of Ipswich women, under the leadership of Mrs. Joseph Ross, will show a living room unattractively arranged. The women will later rearrange the room to make it more attractive.

A nutrition group in Saugus, will

BETTER HOMES DAY

Program 10.30-3.30

Greetings Director F. A. Smith
Purpose of Better Homes Day

Miss Marion P. Crawford
Home Demonstration Agent
Home Nursing Play

Amesbury Group
Style Show—Today and Yesterday
Salem Group

Basket Luncheon, 12.30-1.45
Community Singing

led by Andover Group
State Supervisors

Mrs. Annette T. Herr
Miss Caroline E. Nourse
Address Mrs. Elizabeth McDonald
Exhibits—Home Nursing, Living
Room, Diet Shop and Clothing.

EXTENSION COURSES OFFERED ESSEX COUNTY WOMEN FOR 1927-1928

The following courses are planned primarily for women who live in communities where other help in home economic subjects is not available. Homemakers interested in any of these courses should communicate with either their Town Chairman or the Home Demonstration Agent.

I. NUTRITION

A. Study of Foods

Food values, meal planning, food budget, short cuts in meal preparation, table service.
Five meetings, held weekly.
A simple meal is prepared at each meeting.

B. Food Selection—Conducted by Local Leaders

(Note. A Local Leader is a woman who, after receiving information from the Specialist, imparts this to an organized group in her community.)
Scoring of food habits, food requirements, food budget, special diets, food for sick and convalescent.

Demonstration at each meeting.

Four meetings, held monthly.

C. Child Feeding

exhibit a Diet Shop. This will consist of special diets, under the following heads Underweight, Overweight, Relief of Constipation, Strenuous Worker and Sedentary Worker. This exhibit should teach much in the matter of planning a diet for different types.

The home nursing group of Danvers will exhibit home appliances which are essential for the comfort of patients in the home.

The clothing instructors will put on an exhibit of hats and dresses made by the women in the various groups.

The pregnant mother, infant feeding, food from one to thirteen years.

Two or three meetings, held monthly.

II. HOME MANAGEMENT

A. Living Room Improvement

Walls, floor, draperies, furniture, pictures and accessories.
Four meetings, held monthly.

B. Kitchen Improvement

Scoring of kitchen, floors, walls, arrangement, equipment. Help given in special problems upon request.

Four meetings, held monthly.

C. Home Nursing

Equipment and care of the sick room, appliances, bandages, dressings.

Demonstration at each meeting. Eight or ten meetings, held weekly.

D. Household Accounts

Business methods in the home—food, shelter, clothing, higher life.

Four meetings, held monthly.

E. Furniture Renovation

Refinishing of durable furniture of good design. Chair caning.

Four meetings, held monthly.

III. CLOTHING

A. Garment Making

Units,—cotton, woolen, silk, renovation.

Eight or ten meetings, held weekly.

B. Children's Clothes—Conducted by Local Leaders

Construction, pattern alteration, material, finishes, decorative stitches, hygiene of clothing.

Four meetings, held monthly.

C. Sewing Machine Equipment

Use and care of machine and attachments.

One all-day or two half-day meetings.

D. Garment Finishes

Machine binding, pockets, buttonholes, decorative stitching.

One all-day meeting.

IV. MILLINERY

Units—velvet, silk, straw, renovation.

Five meetings, held weekly.

V. FOOD PRESERVATION

Lecture demonstrations—spring.

Suggestions given those canning for sale.



White Pine—A Paying Timber Crop in Massachusetts

CULTIVATED BLACK CURRANTS ENDANGER WHITE PINES

It has been determined that the European or cultivated black currant is the most susceptible host plant of the white pine blister rust. The blister rust is a disease caused by a fungus which spends a part of its life growing in the leaves of currant and gooseberry plants, and the remainder in the bark of white pine trees. The disease is only slightly injurious to currants and gooseberries, but kills white pines of all sizes. The rust spreads by means of wind-carried spores (like seeds.) These disease spores cannot spread the rust to white pines, unless currant or gooseberry bushes are present. All kinds of currants and gooseberries are attacked, but the cultivated black currant becomes diseased more easily than other kinds, and is more active in spreading the rust.

Comparative Importance of White Pines and Black Currants

The white pine is the most valuable timber tree in Massachusetts, and ranks high in the development of forestry within the state. There are thousands of acres of young pine growth in Massachusetts, which, if protected from the blister rust, will provide the white pine lumber of the future. The wood of white pine, in one form or another, is used for so many purposes that the preservation of our white pine forests is of importance, not only to pine owners, but indirectly to every citizen.

On the other hand, black currants are not grown in large numbers in Massachusetts, and are of very little commercial value. The black currant is not a native American plant; it is of European origin. The blister rust likewise came to us from Europe. Unfortunately, there is such a natural attraction between the cultivated black currant and the blister rust fungus, that these plants become infected many miles from diseased white pines. When black currants do

become diseased, they act as centres from which the rust spreads very rapidly to currants and gooseberries and to white pines. In addition, diseased black currants cause more severe and extensive damage to white pines, than do other kinds of currants and gooseberries.

Because of their vigorous habit of spreading the blister rust, cultivated black currants are a serious menace to the white pine forests of Massachusetts. Such bushes are a public nuisance and have been outlawed within the state. Owners of these plants are urged to destroy them at once.

How to Recognize the Cultivated Black Currant

The black currant looks like the common garden red currant in general appearance, but, as a rule, it is a larger and more vigorous bush. The fruit is black, as the name indi-

cates. The leaves are thinner and more sharply pointed than those of the red currant, and the lower surface of the black currant leaf is covered with tiny bright dots, yellowish in color. The leaves and stems, when crushed, give off a strong spicy odor.

What to Do

It has been conclusively demonstrated during the past ten years that under ordinary forest conditions in eastern United States, white pine forests suffer no further appreciable damage from blister rust if all currant and gooseberry bushes in and around white pines are eradicated. In addition, ALL cultivated black currants must be destroyed, even though they are several miles from white pine trees.

At the present time, an effort is being made to get rid of all currant and gooseberry bushes in the vicinity of white pines. This general control work now under way in the State, will be strengthened by the complete elimination of the black currant.

Everyone can help in protecting the valuable white pine forests of Massachusetts from further damage by the blister rust. The owner of cultivated black currants can be of special assistance by destroying such plants immediately. Concerted action is necessary for the welfare of your community and the Commonwealth.

Destroy black currants and save white pines. It will pay—do not delay.

This article is issued by the Division of Plant Pest Control, Massachusetts Department of Agriculture, in cooperation with the Bureau of Plant Industry, United States Department of Agriculture and Essex County Extension Service.



Cultivated Black Currants Spread Blister Rust Killing White Pines

ALUMNI NOTES

CLASS OF 1916 AGRICULTURAL

William J. Abbott, 44 North Main St., Lancaster, N. H. Supt. of H. P. Hood's Plant. Married, one son and one daughter.

Arthur E. Bascom, 59 Opeechee St., Laconia, N. H. Boss seamer and fixer. Two sons, ages 4 and 6.

Page Bates, 11 Dominick St., New York City. Student at N. Y. University School of Retailing.

Ralph P. Hussey, Box 73 Lexington St., Kendall Green. Owner of poultry and fruit farm. Married.

Ralph T. Jenkins, 24 High St., Skowhegan, Me. Teller First National Bank.

Paul T. Killam, Topsfield. General farm work.

Hans C. Kondrup, 99 Gould St., Wakefield. Die and tool maker, Sanborn & Co., Cambridge.

Alfred McInnery, 72 Holten St., Danvers. Truck and market gardening. Married, two children.

Luther Martin, 22 Pond St., Marblehead. Owner dairy farm.

Donald A. Snow, Merrimac Rd., R. F. D. No. 1, Haverhill. Farm owner. Married Lois C. Haskell of Marblehead. One son.

Carl Stanton, Box 207, Peterboro, N. H. Landscape architect. Married Helen Klippel January 1918.

HOMEMAKING

Mary E. Bent, Mrs. William Woodworth, 5 Governor's Ave., Winchester. Married Oct. 1924. One daughter, Dorothy Jean.

Lucinda Bousley, 16 Cushing St., Salem. Private nursing.

Edith McCormick, Mrs. Horace J. Baldwin, 172 Liberty St., Lowell. Married Feb. 1919. Horace Stewart, born Dec. 1920.

Eleanor Stetson, 17 Spofford Ave., Georgetown. Bookkeeper.

These graduates failed to return the questionnaires. We would like to hear from them.

Bradford Burnham, Charles B. Chapman, Fred P. Harris, Victor S. Porier, G. Elliotte Prime, Ellen C. Rice, James Sudbay, Patrick E. Sweeney, Fred L. True, Ruth F. Burbeck (Mrs. Ernest B. Frey), Miriam Illingworth, Marion E. Matthews, Margaret Wood (Mrs. Kenneth Tuttle).

CLASS OF 1917 AGRICULTURAL

Stanley DeQuoy, 22 Maple St., Woodsville, N. H. County Club Agent, Grafton County. Married Dec. 1920. Two sons, Paul and Bruce.

John E. Eastwood, 6 Hunt St., Danvers. Dairy instructor, E. C. A. S. Engaged to Miss Eva Chute, 1926.

Saul Freedman, 409 Essex St., Salem. Student, Boston University School of Medicine.

Everett L. Hall, R. F. D. No. 2, Wells, Maine. General farming.

Wendall T. Oliver, West Ferry Rd., Morrisville, Pa. Salesman Moon's Nurseries. Married. One daughter.

H. Ellsworth Robson, 10 Odell Ave., Beverly. Stationary engineer. Married. Three children.

J. Harold Seeley, 121 Porpoise Way, Portsmouth, N. H. Salesman. Married Elizabeth Richards of Newburyport in 1926.

Anders W. Stephen, 776 Summer St., West Lynn. Accountant, General Electric. Married.

HOMEMAKING

Mildred C. Annan, 120 Haverhill St., Mrs. J. J. Clark, North Andover. Gertrude Eliza McCormick, 7 Karl Place, Brockton. Doctor's secretary and assistant.

These graduates have not returned their questionnaires: Arthur K. Fuller, Melvin Grey, Ralph Loring Hanners, Donald Hodgdon, Ralph Shirley, Anna L. Clement (Mrs. Earl Turner), Linda Brown Hoyt, (Mrs. William Todd), Ruth Mabel Taylor, (Mrs. Prince Woodbury).

CLASS OF 1918 AGRICULTURAL

G. Stewart Barnaby, with F. E. Palmer, Florist, 220 Washington St., Brookline.

Horton D. Bradstreet, Pond St., Methuen. Owner of poultry farm. Married Mary E. Mann of Methuen, June 1923. One daughter, Mary Elizabeth.

William L. Chesley, 140 Lake St., Lancaster, N. H. Variety store owner. Married.

John P. Cole, Main St., Salisbury. Married Marion C. Battis, R. N., of Amesbury.

Ernest A. Howard, 136 White St., Haverhill. Agricultural Supervisor Haverhill School Dept. Part time instructor at E. C. A. S. Married Doris H. Green of Peabody, Jan. 1920.

William M. Lewis, Central St., Topsfield. Salesman for Universal Products Co.

Albert B. Ravell, 53 Newton St., Belmont. Chauffeur and gardener. Married Dorothy Hodge, Essex Aggie '19. Daughters, Virginia and Marjorie.

Leonard E. Russell, 57 Endicott St., Danvers. General farming. Master Chebacco Pomona Grange 1926-27.

Philip V. Tarr, 7 Harvey Place, Gloucester. Farm superintendent. Married and two children.

Randolph H. Todd, 12 Highland Ave., Terrace, Malden. Assistant Manager Repair Dept. of International Harvester Co. Married 1923.

J. Edward Twombly, Woodlawn Ave., Amesbury. Accountant with Stone & Webster, Boston. Married. One daughter four years old.

Earl Turner, 193 East Haverhill St., Lawrence. Associated with H. P. Hood Co. Married Anna Clements, Essex Aggie '17.

Gordon F. Woodbury, 62 Center St., Danvers. Landscape Modeler for Olmsted Brothers, Brookline. Married.

HOMEMAKING

E. Mabel Curtis, 11 Cedar St., Salem. Assistant City Clerk.

These graduates did not return their questionnaires:

William Dow, Earle Grant, Dwight Killam, Houston Lovett, Ronald Perley, Fred Perry, Raymond Poor, Ralph Putnam, Harold Stevens, Prince Woodbury, Evelyn Bodge (Mrs. Gilbert E. Tucker), Hope Cook, Edwina Hodges (Mrs. Irving Libby), Louise Russell.



Graduate Nursery Propagator

HOW TO CONTROL BROODY HENS

Prof. E. L. Dakan of Ohio State University has the following to say regarding the management of broody hens.

Broody hens do not lay eggs, and consequently decrease the income from the poultry flock. Any practical method that will decrease either the number of broody hens in the flock or the length of time necessary to break up broodiness, will increase the egg production. It is a good practice to mark a hen when she goes broody, and if it is observed that she goes broody often the best thing to do is to sell or eat her. Broodiness is an inherited character which can be largely eliminated by breeding from hens that do not go broody. When this is practiced for a number of years the number of broody hens can be materially decreased.

The length of time a hen is broody depends upon: (1) The breed; (2) the feed during the broody period; (3) the broody coop; (4) the length of time the hen has been on the nest before being put in the broody coop.

Broodiness in Its Relation to Breed

At the Vineland Egg-Laying Contest it was shown that 75 per cent of the Rhode Island Reds developed broodiness, 70 per cent of the Wyandottes, 66 per cent of the Plymouth Rocks; and only 11 per cent of the Leghorns. This small percentage of broodiness in Leghorns is largely due to selection and breeding. From the same source we learn that the average number of days lost per broody hen was 29.6 for the Wyandottes, 25.7 for the Rhode Island Reds, 24.2 for the Rocks, and 11.8 for the Leghorns. This difference is largely due to the fact that the heavier breeds were broody more often than the Leghorns.

Ration for the Broody Hen

The most important factor in control of broodiness is the feed during the broody period. It was once believed that the hen should be starved while broody. This theory was not based on facts, as starvation increases the brood tendency. The birds should be well fed, and in fact every means should be used to force the food consumption. This can be done by feeding the same ration and using the same methods of feeding as recommended for the laying flock. Water and green feed should be supplied—water especially should be before the broody hen at all times.

The Broody Coop

Broody hens should be transferred to a wire or slat bottomed coop as soon as they go broody. The slat or wire bottom prevents the hens from getting a warm nest, and unless they can sit in on a warm nest they soon go back to laying. The broody coop

should be located in a cool, shady place, preferably outside the hen house.

If the hens are removed from the nest at once, confined to a broody coop, and fed as described above, the broody period should not last more than four or five days.

1927 WEATHER SUMMARY TO JUNE 1

	Jan.	Feb.	March	April	May
Max. Temp.	48 (20th)	52 (23rd)	68 (16th)	90 (20th)	76 (11th)
Min. Temp.	-4 (27th)	5 (5th)	10 (4th)	21 (5th)	34 (2nd)
Ave. Daily Temp.	26.4	28.3	38.3	45.5	52.3
Normal for month	27.8	28.8	35.6	44.8	57.1
Greatest change	36° (18th)	29° (23rd)	38° (11th)	41° (18-20)	34° (29th)
Least change	3° (15-21)	3° (19th)	3° (20th)	11° (2nd)	5° (23-25)
Precipitation	2.71"	3.35"	1.32"	1.40"	2.51"
Normal for month	3.82"	3.44"	4.08"	3.57"	3.51"
Rel. Humidity	No figures	No figures	66%	49%	71%
No. Days Rain or Snow	11	15	11	11	21
No. Days below 32°F.	12	8	5	0	4
No. Clear Days	11	3	13	0	0
No. Partly Cloudy Days	11	15	15	22	17
No. Days No Sun	9	110	3	0	10
Total Hours Sunshine	143	110	270	255	172
Total Possible Sunshine	294	296	320	401	458
% Sunshine	48.8	37.3	61.4	63.6	38.3

Weather Comments

In presenting a summary of the weather for 1927 to date, a number of things stand out as interesting features.

The temperature of 90° on April 20th was the warmest April day ever recorded at the Boston Weather Bureau.

The rainfall is again far below normal. We are over 7 inches short for the first 5 months. This is a greater shortage than we had last year at this time.

The relative humidity for April was unusually low and the reading of 10%

on April 12 was the lowest ever recorded at Boston. This low humidity was as much responsible for the fire hazard in April as the lack of rainfall.

May was a remarkable month, for while rain fell on 21 out of 31 days, there was a total of only 2.5 inches, one inch below normal for the month.

May had only about 50 hours more sunshine than February, which was an unusually cloudy month.

Up to date we have had over 150 hours less sunshine this year than last and over two-thirds of this shortage occurred in the critical growing month of May.

ALBERT EGERTON OF THE GRADUATING CLASS IS LIVING WITH 10,000 CHICKENS

This week Mr. Mostrom and Mr. Moore of the staff visited some students employed out of the county. Among them was Albert Egerton, who started work the middle of March with Mr. Otis Day of Westford, Mass.

Mr. Day conducts one of the largest all around poultry plants in Eastern Massachusetts. He carries 2500 layers, with incubator capacity for 12,000 chicks, and brooder capacity for 10,000. He has sold this year approximately 30,000 day old chicks. He has retained 10,000 for his own use.

Albert's job, since he arrived on his project, has been to care for the chicks. He started with them from the day they came from the incubator to the permanent brooder houses, and has cared for them from that time night and day until they were transferred to the range. He is now comfortably quartered in a small bungalow situated in the middle of a twenty acre field, where the 5,000 pullets have been placed in range houses to stay until they are ready to produce eggs, and be shut up in the

laying quarters. None of these 10,000 chickens were ever on the ground until placed on the range. They have been raised entirely inside the brooder house, or else allowed to run out on wooden platforms in front of the brooder houses.

Egerton says the mortality rate has averaged less than five per cent. He has been successful in keeping cannibalism and feather pullings down to a minimum, and by practising good sanitary principles has had no outbreak of any contagious disease in his large family. Egerton told Mr. Moore that he had averaged to clean every pen and brooder house at least once a week.

All of the chickens were fed sour skim milk for the first six weeks. They have been raised entirely on the all hopper system, that is, no grain was scattered in the litter.

These chickens are quartered in range houses, 100 to a house, and are being hopper fed entirely. There is a good heavy thick sod on this range, and ample shade will be provided by artificial means.

The stock was in good condition, and showed the result of intelligent, faithful care on the part of student Egerton.

GIRLS' PROJECTS

Several of the freshmen girls have positions in homes in Essex County. These students care for young children and act as mother's helpers.

Alice DeCrane, Lynn, '28, and Annabelle McLelland, Beverly, '28, are at the Putnam House, Danvers.

JUNIOR HIGH SCHOOL DAY A COMPLETE SUCCESS Over 700 Boys and Girls Attend from All Sections of the County

The first Junior High School Day ever held in Essex County was successfully carried out on the Agricultural School grounds on Saturday, May 21. For weeks previous to the event, several committees were kept busy making arrangements to entertain the members of the graduating classes of the Grammar and Junior High Schools of Essex County. The program for entertaining the large number who attended (between 700-800) was well carried out. As the various groups arrived they were conducted over the grounds and buildings and all of the work of the School and Farm was carefully explained by the instructors. At noon the groups assembled on the School lawn to witness a live stock parade. After luncheon the visitors were entertained by members of the Homemaking Department who gave a program of readings, songs and dances. Then followed the athletic program, in the midst of which the visitors were entertained by "Fritz," a beautiful German police dog owned by Mr. Clark of the Melrose Y. M. C. A. "Fritz" delighted the boys and girls as he performed several astonishing tricks.

RESULTS OF IDENTIFICATION CONTESTS

In the tree identification contest Robert Merrill, Oscoe Gilman and Bernard Guilford, all of West Newbury, tied for first place. Herbert Henderson of Punchard High School of Andover won first place in both the Wild Flower and Agricultural Implement identification contests. The Household Equipment identification contest was won by Alice Marsh of Beverly.

ATHLETIC CONTESTS Girls' Events

High Jump won by Miss McDonald, Maple Street School, Danvers, 3 ft. 11 in.

Basketball Throw won by Miss Darnly, Oliver School, Lawrence, 55 ft. 4 in.

50-yard Dash won by Esther Stampler, Cobbett School, Lynn.

Shuttle Relay Race won by Oliver School, Lawrence; second, Saltonstall School, Salem; third, Cobbett School, Lynn.

Boys' Events

Running High Jump won by Theodore Frost, Briscoe School, Beverly, 4 ft. 8 in.

Basketball Throw won by Nelson, McKay School, Beverly, 213 ft.

75-yard Dash won by Theodore Frost, Briscoe School, Beverly, 9 1/5 sec.

Shuttle Relay Race won by Eastern Avenue School Gloucester; second,

Ryal Side School, Beverly; third, Danversport School, Danvers.

In the athletic events there were 188 entries from 21 different schools in Essex County. Thirteen different schools won prizes.

Summary of Registration

Gloucester sent the largest number of young people, 135. Danvers was second with *59. Salem sent 55, and Lynn 39, while Beverly sent a group of 30.

IVY POISONING

At this season of the year and especially when the plant is in bloom and liberating pollen, many people suffer from ivy poisoning. The extent to which the poison affects different persons varies greatly. Some are so susceptible that they are forced to take an unwilling vacation, often in bed. Under these conditions it seems desirable that some definite information be disseminated to our readers.

There are two very poisonous plants, both quite common in Essex County which cause more or less serious poisoning to nearly everyone who comes in close contact with them. We refer to the poison ivy and to the dogwood of our swamps. Both plants belong to the (Rhus) or sumac family. The poisonous dogwood usually occurs in our swamps or very wet ravines and while more poisonous than the other, is very much less accessible. On the other hand the poison ivy is everywhere prominent, growing over walls, among hedges, climbing as a rather strong vine on many trees and is rather generally disseminated by birds and otherwise.

Three outstanding things in regard to the ivy should be understood. First, everybody should be taught to identify

it. It is a rather attractive three leaf plant which closely resembles the five leaf woodbine, a non-poisonous plant. Second, every effort should be made to destroy it by cutting, burning or in some cases, spraying to control or eradicate it. Third, for the person who is susceptible to poisoning and is suffering considerable inconvenience, it is well to know that the druggist can supply a solution of sugar of lead (lead acetate) which when applied has the effect of drying up and otherwise overcoming the irritation and eventually curing the patient. Doctors and druggists are also recommending a solution known by the name of White Wash, which seems to be very effective.

4-H CLUB FIELD DAY

Every 4-H Club member in Essex County is waiting anxiously for Saturday, June 11, for on that day we will hold our Annual 4-H Field Day at the Essex County Agricultural School.

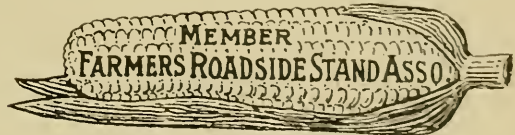
Poultry, Clothing, Canning, Gardening, Forestry, Dairy and Food Club members are all planning to attend, for they know that this year it will be the best ever.

Judging contests, athletic events, singing, stunts and movies are all on the program. If you can do some sort of stunt, or your Club can, be sure to come and do it.

Don't come alone. Bring your friends with you. The more the merrier.

Have you seen the Agricultural School? Here is your chance to see what the School is doing for Essex County.

Come one! Come all!
For when we get together
How happy are we!



WATCH FOR THE EAR OF CORN!

It's Your Assurance of a Square Deal

It's the Sign—

Of honest-to-goodness growers organized to protect you and themselves from unscrupulous peddlers posing as farmers.

It Means—

Real native farm products. Honest

goods, honestly packed, reasonable prices.

Protect Yourself—

Buy from established farmers, ready to stand behind their goods, backed by a State-chartered organization of genuine producers banded together to promote honest roadside selling.

Homemaking Department

ESSEX COUNTY FORTUNATE IN HAVING SPECIAL SCHOOL FOR TRAINING HOME- MAKERS

As I was sitting in my office one day in early spring, busy as usual, with the many duties that must occupy the time of a manager of an active school, a man entered with his wife and daughter. After the customary salutations and a little time spent in getting acquainted, the gentleman asked me to tell him about the Homemaking Department of the Essex County Agricultural School. He was interested to know if it was the kind of school in which he would wish to place his daughter. My answer, Yankee like, was a question. "Does your daughter like cooking and sewing?" The reply was that she was very fond of these subjects. "Then," I replied, "She will probably be interested in this School. Half or 50 per cent of the time is given to cooking, sewing and millinery, while 30 per cent is given to related subjects such as dietetics, home nursing, child training, textiles, hygiene, etc. The other 20 per cent is devoted to the following subjects: English, United States History, Citizenship, Household Arithmetic and Household Science."

"Is there any home work?" he asked.

"The home work consists of a home project in cooking each week, and a home project in sewing each month. There is no other outside work."

"What do you do in Physical Training?"

"Each student has a physical examination and if she is in good physical condition, she may learn to play tennis and basketball. Every girl is given folk dancing and physical exercises, also walks in the out-door air."

"How long is the course?"

"The regular course is three years. There is also a one year special course for girls who have graduated from a High school."

"What are the qualifications for the three year course?"

"A girl must have been graduated from a grammar school, eighth grade, and be 14 years of age."

"What is the expense?"

"This is a free school paid for by the citizens of Essex County for the education of its young people in Agriculture and Homemaking. The only cost is the car fare."

"What time does the School year begin?"

"School begins the day after Labor Day and closes the last of June, with the usual public school vacations."

"At what time does it begin in the morning and when does it close?"

"School begins at nine o'clock and closes at 3.30. The trolley accommodations are very good. The Salem and Lawrence car line passes the School and connects with trains at Danvers and Salem."

"What is a girl fitted for when she leaves the School?"

"She is fitted to do practical work in foods, clothing and hospital work. She may continue her studies elsewhere and become a vocational teacher or with a shorter course become a dietician. In short she may, if she makes the effort, take up any kind of practical home economics work."

"Thank you," replied my new friend, "I should like to enroll my daughter as this type of school is one which appeals to her."

After they were gone, I went back to my work, glad that Essex County had seen fit to organize and support a school in which young people may be educated along lines for which nature intended them.

ELLA S. MORRILL,
Head of Homemaking Dept.

ANNUAL PARENTS' DAY OF HOMEMAKING DEPARTMENT, WEDNESDAY, JUNE 15

On Wednesday, June 15, the Annual Parents' Day of the Homemaking Department of the Essex County Agricultural School will be held in the new Homemaking building. The morning program will open at eleven a. m. with a solo by Miss Ruth Norman of Ipswich, accompanied by Miss Dorothy Donahue of Lawrence, both students at the School. This will be followed by a demonstration of Home Nursing by members of the Homemaking Department. The afternoon program will begin at 1.30 with a health play presented by the freshman class. The remainder of the program is as follows: Essay on the "American Indian," by Miss Gertrude Lynch, of Gloucester; Indian dance by eight girls; essay on "Colonial Life," by Bessie Hadley of Essex; minuet by eight girls; essay, "Training Homemakers at Essex Aggie," by Dorothy McWilliams of Newburyport; athletic exercises by the basketball players.

The Homemaking Department extends a cordial invitation to parents and friends to visit them on that day. As the dining room will be closed for that day, visitors are requested to bring their own lunch.

Gladys Hilbert, Lawrence '27 and Ruth Curtis, Boxford '29, are to be dieticians at the American Woolen Company Camp at Boxford.

Helen Andrews, Boxford, '28, will be assistant dietician at Camp Coaquannok, New London, N. H.

DOES EDUCATION

PAY THE FARMER?

A search through "Who's Who" and similar publications shows that only one person out of every 150,000 who have had no schooling ever reaches distinction in this country. Out of every 87,500 who have had a common school education only one has achieved eminence, while one out of 1,724 high school graduates and one out of every 187 college graduates have done anything to warrant their names being placed in such publications. Parents who give their children a common school education give them four times the chance to become a leader that a child of no education has. A high school education will give them 87 times the chance and a college education will give them 800 times the chance.

Surveys made in such states as Georgia, Texas, Indiana, Illinois, Kansas, Iowa, Wisconsin, Missouri, Ohio, Washington, New York and Maryland answer affirmatively the question as to whether higher education pays the farmer or not. In the studies made in these states, the conclusion shows beyond question, that the more education the farmer possesses the larger is his income.

Most studies that have been made along the line of education for the farmer lead to the definite conclusion that even a common school education is of distinctly greater financial advantage than no education at all, and that the years spent in high school and college are well repaid by increased earning capacity when farm activities are undertaken.

Not only does an education pay the individual, but it pays the state in the greater earning capacity of its individual members, in a decrease of illiteracy, and in a higher standard of living which usually results with increased earning capacity. Education does not increase native ability, but it develops it and gives greater opportunities for its expression. An educated farmer has a wider field of opportunity and a better chance to exercise his trained abilities than the untrained individual, although they may have started with equal native talents.

F. A. MERRILL,
Specialist in Agricultural Education.

SOME HOMEMAKING PROJECTS FOR THE SUMMER

The projects for the coming summer of the students in the Homemaking Department are most interesting and profitable.

Several girls are planning to do waitress work in hotels at Rye Beach.

Evelyn Emmett of Saugus, and Nettie Devens, Amesbury, High School Specials, are entering hospitals as assistant dieticians.

Doris Griffin, Rockport '27 and Doris Montrose, Lynn '27, will be assistants in restaurants in Rockport.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 8

HATHORNE, MASS., AUGUST, 1927

No. 3

FRUITS OLD AND NEW

New Apple Varieties for Essex County

In the last issue of the Farmer, space was given to discussing the passing of varieties and the effort which is being put forth to originate and test new varieties. In Essex County we have a soil and climate which is admirably suited to the highest development of many varieties of apples. The value of the crop of apples exceeds that of the total value of all other fruits produced in the county. Further, we have a large and increasingly valuable local nearby market which appears to be able to absorb high grade fruit at a remunerative price.

Change in Tastes

A most remarkable but gradual change amounting to a mild revolution has been taking place in the taste and demand for apples. The rise of the soft fleshed apples of which McIntosh Red is the type has been very rapid and general. Coupled with this demand has come a demand for the mild fleshed high quality dessert fruit as typified by the Delicious group. The waning popularity of the high colored but rather low quality western apples which have been retailed on our market at a price for single fruits has done much to prepare our consumers to seek and willingly pay for high quality local fruit.

The McIntosh-Fameuse Varieties

This group of apples leads the list of soft fleshed high quality fruit. The varieties came originally out of the cold north, and this has insured great hardness in bud and wood. It reaches great perfection in this county and yet the range in the United States over which it can be successfully grown is rather limited.

We have now, mainly through the efforts of the New York Agricultural Experiment Station and the Dominion Experimental Farm of Canada, some outstanding results to report. As a result, we are now able to report a list of McIntosh-like varieties which will extend the season from early fall to spring. This list, arranged in approximate order of ripening, is: Early McIntosh, Melba, Milton, Sweet McIntosh (McIntosh Red), Cortland, Macoun. There are many others containing McIntosh or Fameuse blood influence, and we shall undoubtedly

hear of surprising results during the next few years.

The Delicious Group

Three varieties, Delicious, Golden Delicious and later Starking, have been extensively grown and now fruited and placed upon our markets. Two unfavorable characteristics seem to be appearing with locally grown Delicious. As the trees approach full bearing age we detect a tendency of the fruit to run too small to command our markets and further in our normal season we find difficulty in securing the full desirable color which is heavy red overspreading a rich yellow under color. As a result of crossing with desirable varieties we now have a group which will further extend the season. The following are varieties to consider: Orleans, Medina, Newfane and Sweet Delicious.

Red Gravensteins

For about a month in mid-fall each year our markets are supplied with a wonderful apple in the form of the old variety, Gravenstein. With the advent of new varieties it holds its place. It is a little chary of soils, preferring a heavy moist loam with some clay. Its greatest fault is its failure in some years and on many soils to get beyond a slightly red striped apple and often lacks the rich yellow under color. There is now available a rich solid colored apple of the most attractive red, known as Red Gravenstein. It is a true bred sport and will reproduce true to type and is destined to take a favorable place in our orchards and on our markets.

Net Results

Our tastes as well as our markets are changing. The advent of these noteworthy new varieties are destined to have a great influence on our markets and our consumers. There has never been a time when the buyer is so willing to learn of valuable sorts, or so well prepared to pay liberally for fruit which satisfies. Every fruit grower whether amateur or commercial should attempt to learn about and follow these new developments. If you, reader, are interested to get more information, we, at the school, would be glad to co-operate with you.

ESSEX AGGIE SENIOR

ESTABLISHES MODEL

ROADSIDE STAND

One of the most conspicuous senior projects for this year is that of student Harry Lear, 312 Walnut street, Lynn. This young man has established a flower and vegetable stand on the Andover Turnpike near the Peabody-Danvers line. Early this spring 2½ acres of land were purchased and Harry set to work getting the land into shape. In the short space of four months, the place has been transformed into a beauty spot.

The venture was not entered into blindly, as this student has studied vegetable and flower gardening for the last four years. Last year he was employed by the H. A. Dreer Nursery at Riverton, N. J., for several months, and while there Harry obtained valuable experience in the propagation of flowers. His gardens this year reflect his careful training, as they are beautifully laid out, and the student has had remarkable success with plants difficult to raise.

Realizing that he would need large quantities of seedling plants, he constructed a 50 foot hot bed at his home in Lynn, and raised thousands of vegetables and flower seedlings. Many of these were sold at the home place, while the remainder were set out in pots around the stand.

A small, attractive booth was erected early in July and Harry is now well established in a business of his own. Although in most cases it takes a long time to work up a good trade, this student has already met with unusual success. Perhaps the success of his project is due in a large measure to careful preparation and persistent effort.

Agricultural Fairs

TOPSFIELD FAIR

September 14-17

EASTERN STATES EXPOSITION — SPRINGFIELD

September 18-24

NEW ENGLAND FAIR WORCESTER

September 27 — October 1

BROCKTON FAIR

October 4-8



ESSEX COUNTY HOMEMAKERS IN

These women cooperate with the Home Demonstration Agent

Essex Farmer and Home Maker HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.
Hathorne, Mass.

A BI-MONTHLY PUBLICATION SUBSCRIPTION FREE

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Francis C. Smith, County Agricultural Agent
Marion P. Crawford, Home Demonstration Act.
Robert B. Ewing, County Club Agent

CALENDAR

- Aug. 25 Exhibition at Salem Play-ground.
- Sept. 6 Opening Day, Homemaking Dept. New Students.
- Sept. 6 Opening Day, Agricultural Dept. New Students.
- Sept. 7 Opening Day, Homemaking Dept. Advanced Students.
- Sept. 10 Annual Sam Sam, United Shoe Machinery Athletic Association, Beverly.
- Sept. 14, 15, 16, 17 Essex County Agricultural Society, Topsfield Fair.
- Sept. 26 Opening Day, Agricultural Dept. Advanced Students.
- Oct. 28 Annual Science Day at School.
- Nov. 22 Graduation Day. Alumni Reunion Day.

WEATHER NOTES

June and July, 1927

	June	July
Max. T	90	93
Min. T	35	43
Ave. T	61.9	69.8
Rainfall	2.02"	2.44"
Normal	3.03"	3.36"
Humidity 8 a. m.	66.5%	82.8%
Number of days of rain	15	20
Number of clear days	7	2
Number of partly cloudy days	19	24
Number of days without sun	4	5
Hours sunshine ..	294	225
% sunshine	64.2	48.4

The month of June was considerably colder than normal, and had one inch under the normal rainfall. Its humidity was about average, and it was a bright, sunny month.

In July the temperature was about normal, but was on the whole a disagreeable month with high humidity and rain on twenty days. Sunshine was below normal. In spite of this the rainfall was considerably below normal for the month.

On one day (the 27th) while there was .98" rain in Boston, at the school only .02" was recorded.

According to the school figures the rainfall for the year is now nine inches below the normal for Boston and vicinity for the first seven months of the year. The total for the year to date is 15.75".

English Medals

Abraham Krasker, former instructor at this school, has signified his intention of presenting two medals each year to the senior in each department of the school who has accomplished most in oral and written English. It is the purpose of the donor to stimulate interest in public speaking, dramatics and debate as well as in written composition. The English medals will be awarded in 1928 at graduation.

CAMP BAUER ACTIVITIES

Season 1927

Fifteen Essex County boys have been working and living at the Essex County Agricultural School since early in May. Each one is working conscientiously on his particular project for the six months work period. The kinds of agricultural practice studied first hand by these boys include, Dairying, Vegetable Gardening, Landscaping, Pomology and Floriculture.

The spare time of the boys is always of importance to them. Swimming in Deep Hole, Middleton, is popular, for all of them are good swimmers. The modern dives, swan, jack-knife, and gainers, are executed with creditable dispatch. Tennis is very popular with all the boys, and a tournament to determine the champion tennis player of the camp is now in progress. Baseball has had its share of devotees, and a hectic game with the Industrial camp was much enjoyed by all. The boys are in good health, and will probably remain so, due to that old familiar combination so agreeable to everyone's constitution, "early to bed, early to rise, with plenty to eat, and exercise."

The following boys have been at the camp during the greater part of the season:

John Armitage, Lynn
Herbert Bailey, Merrimacport
Malcolm Bryant, Bradford
Paul Bubier, Rowley
Albert Cleaves, South Groveland
Ernest Dowdall, Danvers
Ernest Blaney, Saugus
Richard Gould, Amesbury
Herbert Kirk, Amesbury
Harry Nelson, Cliftondale
William Mansell, Salem
Courtland Loughton, Haverhill
Roland Pickett, Byfield
Eino Sormunen, Peabody
Raymond Turner, Haverhill



ATTENDANCE AT BETTER HOMES DAY

carrying out the Extension Service Program in their Communities.

The Home Demonstration Agent Answers Timely Questions Concerning the Homemakers' Problems

1. Question: What practical help can you give in planning and preparing meals for a family having an overweight mother and underweight son?

Answer: The Extension Department has been successful in giving such help through a series of four nutrition meetings. We would be glad to hold these meetings in your community if you can find ten or more women to form a group for the study of planning and preparing meals.

2. Question: I have a large farm kitchen which requires many steps in preparing meals. Can you give me any help in rearranging that will not be too expensive?

Answer: The Extension Department is glad to give help in the rearrangement of kitchen equipment and utensils. The Home Demonstration Agent will give help either in a personal visit or will conduct a series of four meetings if your neighbors would like to join with you in making improvements in their kitchens. We are also glad to help in improving the living room.

3. Question: I am a young mother who worked in an office before marriage. Can you give me help in making my own clothes and those of my 2-year-old daughter?

Answer: Classes are being formed in which women are taught how to make dresses for themselves and children. If a group of sixteen women is formed in your community we will send you an instructor.

4. Question: What can you give our town in Home Nursing? We live five miles from a doctor and often have emergency cases.

Answer: The Extension Department conducts a series of ten meetings in Home Nursing and

First Aid. This course is given by a nurse to a group of sixteen or more women in any community desiring this help.

5. Question: Can you give me suggestions for packing lunches for my 10-year-old daughter? Answer: Do you know about the 4-H Clubs of the Extension Department? They form lunch box clubs in which help is given in packed lunches. Write to our County Club Agent and he will help your daughter to form such a club.

ANNUAL BETTER HOMES DAY. JUNE 8

The annual Better Homes Day of the County Extension Department was held on June 8 at the Agricultural School.

Interesting exhibits, a fine program, perfect weather, and a beautiful campus all contributed toward making an ideal day for the 400 or more women in attendance. The exhibits prepared by the women of Danvers, Ipswich and Saugus showed in an interesting way the work of extension groups in their communities.

The Home Nursing play, "Convincing Mrs. Radio," given by the Amesbury group, and the Style Show by the Salem group, were interesting from start to finish.

Community singing led by the Andover group made a good beginning for the afternoon program.

Miss Caroline E. Nourse of the State Department of Education and Mrs. Annette T. Herr, State Home Demonstration Leader, spoke of each homemaker's job as being an individual problem and suggested child training should be emphasized more in Extension programs. Mrs. Elizabeth Macdonald of Boston University spoke in favor of cooperative housework. She also spoke on child training, saying that the training of the child was the greatest objective in homemaking.

ALUMNI DIRECTORY

Class of 1919

AGRICULTURAL

Bergstrom, Edwin E., 106 Bellevue Avenue, Rutland, Vermont. County Club Agent. Married. One son.

Cushing, Roy D., 6230 Greenwood Avenue, Chicago, Illinois. Employed in Chicago packing plant of Libby, McNeill & Libby Co.

Frisbee, Ralph T., Whitehall Road, Amesbury. Owner, operator of general farm. Married. One daughter.

Johanson, Roy T., 96 Lynn Fells Parkway, Melrose. Working in shoe plant. Married. One son.

Nelson, Robert E., 6 Highland Place, East Gloucester. Superintendent, private estate.

Raymond, Byron D., 36 Eliot Street, South Natick. Private estate work. Married. One son.

Richard, Irene T., 150 Bridge Street, Salem. Steamfitter. Married.

Tucker, Gilbert E., Pleasant Street, West Newbury. Owner-operator general farm. Married Evelyn Bodge, '18. One daughter.

Woodworth, Ralph M., Turner Hill Farm, Ipswich. Orchard foreman. Married. Two sons.

HOMEMAKING

Burnham, Blanche S., Belcher Street, Essex. Teaching sewing and millinery in Topsfield High School.

Estes, Ruth F., 753 S. W. 1st Street, Miami, Florida. Assistant Manager, Coral Gables Cafeteria.

Ward, Elinor H. (Mrs. Frank Rood), Southampton, Mass. One daughter.

Questionnaires Not Returned

Begin, Joseph J.
Bloom, Ernest R.
Holstrom, John A.
Witham, Raymond
Hodge, Dorothy A. (Mrs. Albert Ravelle)
Riggs, Edith (Mrs. Frank Robson)

INCREASING THE HAY YIELD

Commercial Fertilizer Returns 100 Per Cent on Investment

How many investors would consider such a statement? But Edward Shattuck, Andover, spent \$200 on commercial fertilizers this spring and says the increased hay yield is worth at least \$500. Excellent results were secured by M. C. Arthur, Turner Hill Farm, Ipswich; Robert Sawyer, Bradford, and A. W. Hayden, Wethersfield Farm, Danvers.

At the latter place, a fertile field was top dressed early in the spring with an 8-6-6 mixture, using 200, 400 and 600 pound applications per acre. There was no appreciable difference in yield from these varying amounts, probably because there was an excellent sod and well manured in the past.

The Argilla Stock Farm, at Ipswich, secured a 2750 pound gain in hay due to top dressing a three year sod on a clay loam soil. Mr. MacKenzie used the 5-8-7 formula.

Albert Elwell, Byfield, used fertilizers on many of his fields, all showing excellent results. But one of the poorer fields showed a gain of only a half ton. One must have a fair sod to fertilize in order to get results.

Louis J. Bourdelais, Andover, had the same experience of using fertilizer on a sod too poor in fertility. But on a sod that produced 2500 pounds without fertilizer, he got 4609 pounds by using 150 pounds of nitrate of soda alone.

John T. Chadwick, West Boxford, used 500 pounds of 8-6-6 on a poor sod, sixth year of cutting. This sod untreated gave only 1600 pounds, but treated he cut 4687 pounds, a nice gain of 3187 pounds of hay or 1.6 tons, worth \$32 at the farm.

W. C. Boyce, North Andover, had a fine field. He used 300 pounds of 8-6-6 and got an increased production of 2500 pounds of hay. His barns are bursting with hay in spite of the bad weather.

Chauncey A. Gleason, East Haverhill, used 350 pounds of an 8-6-6 on a second year sod and got 5930 pounds. His fourth year sod gave 4062 pounds and a ten year sod gave 3125 pounds. He left none untreated. You see, he wanted hay. He mixed part of his fertilizer himself and claimed he saved \$7.00 over the ready-mixed this spring.

These results are only indicative of the returns any farmer can get provided he has enough grass sod to fertilize. Of course, top dressing weeds is not profitable. Heavy applications are not likely to be sufficiently profitable to pay, but 200 to 350 pounds of a highly nitrogenous fertilizer will give good results where the sod is worth fertilizing.

In 1919, R. H. Gaskill, former County Agent, reported three demonstrations where applications of 150 pounds nitrate and 200 pounds of acid phosphate gave two tons increase.

Professor Helyar of Amherst says he would never use manure as a top dressing on meadows or alfalfa but would use commercial fertilizer. The average application now costs less than \$10 per acre. One cord of manure is worth about that. What do you think of this idea of using fertilizers?



Cup to be Awarded Club Member Having Best Pen of Birds in Essex County.

FERTILIZER VALUE OF ALFALFA \$34.73 PER ACRE

There are about 75 men growing alfalfa in Essex County. The yields of hay vary considerably, but after making a thorough study of this crop in this section, I am convinced that alfalfa can be grown successfully and economically to stay in at least six years.

One of the biggest reasons for growing it is because an average crop of hay has a fertilizer value of \$34.73 per acre. Fed to livestock, much of this is returned again to the soil. Then, too, the alfalfa plant returns in its roots annually about 60 pounds of nitrogen or the equivalent of two large bags of nitrate of soda worth about \$12.00.

However, this crop takes out lime very quickly. An average crop removes 90 pounds of lime annually. This is theoretically enough to remove the calcium from one ton of limestone in ten years. If the soil needs three tons to neutralize the acidity, then it is obvious that one ton extra is necessary to grow alfalfa for a period of years.

VEGETABLE JUDGING TEAM AT SYRACUSE

Three Essex County 4-H Club members represented this state in vegetable exhibits, judging and demonstration contests held by the Vegetable Growers' Association of America at Syracuse during the week of August 22-27.

Nathan S. Hale and Arthur K. Gordon of Rowley and Horace J. Shute of West Newbury were chosen by the County Club Agent because of their experience in raising and marketing vegetables. The boys exhibited some of their own products and were awarded second prize in a field of thirteen entries, being only surpassed by Cayuhoga County, Ohio, by one point. In the vegetable judging contest the Essex County representative, Horace Shute, placed ninth. The demonstration entitled, "Packing Products Productively," and which consisted of selecting, grading and packing carrots, lettuce, corn and cucumbers, was well received.

Instructor C. M. Stearns of the school coached the team and accompanied the boys to Syracuse.

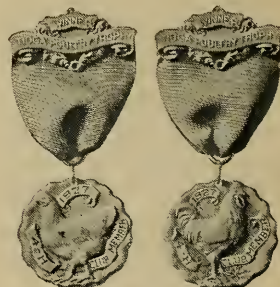
ATTENTION, POULTRY CLUB MEMBERS

Prize Awards to be Made at Topsfield Fair

The Tioga Mill & Elevator Co., Waverly, N. Y., offers a silver cup and two medals to poultry club members in Essex County. The cup shown on this page is offered to the 4 H Poultry Club member owning the best young pen of birds in the county. Philip Clark of Andover won the silver cup last year in this contest.

The medals are awarded to club members owning and exhibiting the best pullet and the best cockerel.

The awards will be made at the Topsfield Fair in September under the direction of Robert B. Ewing, County Club Agent for Essex County.



Medals for Best Pullet and Best Cockerel.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 8

HATHORNE, MASS., NOVEMBER, 1927

No. 4

GRADUATION EXERCISES NOV. 22—LARGE CLASS TO RE- CEIVE DIPLOMAS

The twelfth annual graduation day will be observed on Tuesday, November 22nd when one of the larger classes will be graduated. The exercises will be held in the large hall in the Agricultural Building at 3 P. M.

The student part in the program will consist of singing by a large glee club and instrumental music by the School Orchestra. The Agricultural Department will be represented by Palmer S. Perley and Horace Shute, assisted by Irwin Dodge. The Home-making Department will present Dorothy MacWilliams and Doris Griffin. The following is the list of students in the graduating class.

Agricultural Department

Armitage, S. Philip. Lynn; Bragdon, Frederick N., Essex; *Collins, Bernard F., Salem; Dodge, Edwin J., Danvers; Dowdall, Ernest L., Danvers; Egerton, Albert M., Beverly; Ellis, Henry L., Merrimac; Frost, Roy B., North Andover; Lear, Harry W., Lynn; Lewis, Donald B., Nahant; Luce, Stanley E., Haverhill; Marston, Paul C., Georgetown; Muniak, Michael J., Lawrence; Noyes, Robert, West

Continued on page 8

MODERN MILK ROOM AND EQUIPMENT ADDED TO ESSEX AGGIE DAIRY

Essex County Agricultural School has added to its equipment a much needed modern dairy plant. The plant will be equipped to take care of market milk and to some extent the manufacture of dairy products, by the most up-to-date methods.

The plant will be housed in a building 32 ft. by 28 ft. This building will be divided into the following rooms: Wash and Babcock testing room, boiler room, milk and dairy manufacturing room, locker room, storage and weight room, and a refrigeration room.

The wash room will be equipped with a Fort Atkinson washer and sterilizer, a steam Babcock test machine and can racks. In the boiler room we will have a 5 H.P. boiler. The equipment in the Milk and Dairy Manufacturing room will consist of a barrell cooler, a Fendler pasturizer, a Milwaukee type "B" bottler, a nofoe milk pump, a Deland separator, butter churn, butter washer, ice crusher, and a vertical freezer. The locker room will be equipped with lockers for students who work in the dairy department and a wash sink. In the storage

SUCCESS OF "AGGIE" STUDENTS IN JUDGING AT FAIRS THIS FALL

Students at Essex Aggie have won prizes at the convention of the Vegetable Growers Association of America at Syracuse, New York; Topsfield, Worcester, and Brockton in vegetable judging and exhibits.

In August, Horace Shute, Nathan Hale and Arthur Gordon put on a very commendable demonstration at the Vegetable Growers Association Convention in Syracuse, New York, when they showed how to "Pack Vegetables Productively." They also took second prize in exhibiting vegetables only losing by one point to Cuyahoga County, Ohio.

At the Topsfield Fair Joseph Finnochio took second place judging vegetables. Prizes were also taken by Joseph Finnochio, Nathan Hale and Arthur Gordon for exhibiting plates of vegetables.

In a field of twenty-nine contestants,
Continued on page 8

room we will have a refrigeration machine, brine tank, and brine pump and a banjo head milk conductor and spring scales.

J. E. E.



Top Row, left to right—Frost, Ray, Marston, Luce, Egerton, Tibbetts, Noyes, Mr. Moore, Dowdall, Muniak.

Second Row—Lewis, Walker, Ellis, Lear, Wood, Armitage, Bragdon, Dodge, Stone.

Third Row—Collins, Shute, Robator, Sproull, Veiner, Scully, Sewell, Perley.

Fourth Row—Ruth Walker, Mrs. Clapp, Ruth Norman, Beatrice Bradley, Nettie Devins, Eleanor Marshall, D. Arline Flint, Katherine Baillie, Florence Lawson, Evelyn Emmett, Dorothy Donahue, Rose Weinstein.

Bottom Row—Evelyn Mooers, Elizabeth Hutchinson, Marion Churchill, Kathryn Sullivan, Lydia Fellows, Iona Hurd, Dorothy MacWilliams, Doris Griffin.

Essex Farmer and HomeMaker

HATHORNE, MASS.

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BOARD OF EDITORS

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Marion P. Crawford H. A. Mстром

CALENDAR

- Nov. 2 Annual Science Day at School, both departments.
Nov. 22 Graduation Day and Alumni Festivities. Graduation at 3 P. M. at the School.
Nov. 23-26 Thanksgiving Recess.
Dec. 16 Christmas Recess begins.
March 14 Farmers' Day.
Jan. 3 School reopens.

A COMMUNITY CENTER

Do our readers realize how rapidly the School is becoming a community center? As you all know our grounds are ample and beautiful. Geographically the School occupies a very central point in the county.

Every year with the development of the trees, shrubs, nursery and flowering beds, the place presents a more and more attractive appearance.

A little study of the season shows the gathering of fourteen different groups at the school with the total attendance exceeding 4000. It has always been the policy of the authorities in charge to welcome any group whose interests parallel those of agriculture and homemaking.

OUR TWELFTH GRADUATION

November 22nd marks another important date in the history of the School. A class of forty-nine will receive from the Trustees, recognition of their work. We believe these young people are especially well qualified to make and take their places in the world. It is an interesting fact to note that we will have at the end of these exercises a total of 444 graduates.

Already our graduates are making a very prominent place for themselves in their chosen field. It will be only a comparatively few years when a very large percentage of the farming and gardening enterprises of this part of the State will be in the hands of men and women trained in this School.

CLASS GIFTS

The Class of 1927 has presented two framed pictures to the School. One of these, "Sir Galahad," has been hung in the Girls' School while the other, "Ploughing," by Rosa Bonheur, is hung in the study room of the agricultural building. The Class of 1927 has acted wisely in having the pictures suitably engraved and their action should be followed by future graduating classes.

ANNUAL BANQUET OF ESSEX AGGIE ALUMNI NOV. 22nd.

The annual business meeting and banquet of the Essex Aggie Alumni Association will be held at the School on Tuesday, November 22 immediately following the graduation exercises.

The business meeting will be conducted in the Homemaking Building at 5.30 sharp, followed by the Annual Banquet at 6.15.

The Alumni Association has invited the graduating class to be their guests at the annual dance in the evening.

WEATHER NOTES FOR AUGUST AND SEPTEMBER

Max. T. for August, 83°, 5th, 9th.
Max. T. for September, 82°, 3rd, 7th, 10th.

Min. T. for August, 45° 3rd, 25th.
Min. T. for September, 39° 25th.
Average daily T. for August, 64.5°.
Average daily T. for September, 61.4°.

Precipitation for August, 6.41".
Precipitation for September, 2.77".
Average relative humidity for August, 8 a. m. 83.8%.

Average relative humidity for September, 8 A. M. 83.1%.
Number of clear days in August, 8.
Number of clear days in September, 14.

Number of partly cloudy days in August, 17.

Number of partly cloudy days in September, 14.

Number of days in July without sun, 6.

Number of days in September without sun, 2.

Number of days in August of rain, 18.

Number of days in September of rain, 7.

Hours of sunshine in August, 238.

Hours of sunshine in September, 252.

Percent sunshine in August, 55.

Percent sunshine in September, 67.

August was a cold rainy month comparatively while September was warm and sunny. The rainfall in August was more than two inches above normal while September was a little short of normal. Up to October 1, we were seven inches short on rainfall for the year.

FOOTBALL 1927

Aggie Plays Holten High at Danvers, Nov. 24

On Thanksgiving Day morning, Essex Aggie will again play Holten High of Danvers for the first time in two years. Last year Aggie did not have a football team but this year a number of students have interested themselves in the sport and Coach Philip Cough has succeeded in developing a team.

The following games on the Aggie schedule are as follows:

At Methuen, November 12; at Stoneham, November 19; at Danvers, November 24.

DUAL MEET AT NORFOLK

The Essex Aggie Track Team was defeated in a dual track meet with the Norfolk County Agricultural School by a score of 31-28.

Members of the Essex Aggie team places as follows:

100-yard dash, Mooers, third, 1 point; 220-yard dash, Hale, second, 3 points; running broad jump, Taylor, second, 3 points; high jump, Moulton and Roberts tied for second and third, 4 points; mile, Mooers, second; Corners, third, 4 points; shot put, Wilson, first, 8 points; Batchelder, second; relay, won by Essex Aggie, 5 points.

The relay team consisted of Wilson, Taylor, A. Henderson and Hale.

HALLOWEEN PARTY

Friday afternoon, October 28th, the Junior Class entertained the student body at a Halloween social.

The following vaudeville program provided an abundance of laughter from 2.30 to 3.30 P. M.:

"Meller Lramer," by the girls.
"Izzy's Veddng," monologue by Instructor Gifford.

"Style Show," by the girls.
"Water Bucket Scene," by the boys.
"Kentucky Derby," by the boys.

Refreshments in the form of ice cream and sweet cider were then enjoyed, following which, came dancing until 5.30.

ASSEMBLY TALK BY AVIATOR

At a recent joint assembly of the Agricultural and Homemaking Departments called in observance of Columbus Day, Mr. Eastman, an aviator, connected with the Boston Airport Corporation gave a very instructive and enthusiastic talk pertaining to recent developments in the art of flying which made possible the modern Columbus feat accomplished by Charles Lindbergh.

Heavy rains have fallen during the first part of October and it is likely that the present shortage of seven inches will be materially reduced by the end of the month.

COUNTY AGRICULTURAL AGENT

SELECTED CORN OUTYIELDS COMMON

The Agricultural Agent of the Extension Service arranged a corn test with Clark Brothers, Johnson street, North Andover, last spring. The Amherst College sent a small amount of selected improved leaming seed for the test. This was compared with local leaming purchased through the seed trade.

The results show the value of earliness and selection. A square rod of the M. A. C. yielded 201½ lbs. of green silage as cut. This was in late dough. Some kernels were just ready for glazing. The unhusked ears weighed 63½ lbs.

The common leaming was in late milk state, weighed 179½ lbs. ears 73½ lbs. The corn in these plots were right beside each other, planted three and one-half feet apart each way, about June 1. The field was manured and 300 lbs. of acid phosphate were applied.

Dry Matter

The question of variety of corn for silage is important. Total dry matter is an indicator, maturity determines the dry matter. Numerous experiment stations have conducted tests and the average of five stations show variations in the dry matter as follows:

Stage of Maturity	Per cent dry matter
Tassel	13.0
Silk	15.0
Grains forming	17.4
Early milk	19.5
Late milk	22.5
Early dough	25.3
Late dough	29.0
Glazing	30.8

In this test using 29 per cent as the basis of computation, we get 58.43 lbs. dry matter per square rod of M. A. C. leaming and 40.39 lbs. with the common leaming using 22½ per cent as the basis of figuring.

Advantages of Mature Silage

This shows that for silage corn should be in late dough stage for greatest food value, yet it contains enough succulence to accomplish results desired. There is less loss from fermentation in the silo from such corn. Immature corn ferments and creates more acid, hence the more mature corn is more palatable. In addition, such mature corn is more digestible.

In thirteen experiment stations where tests have been conducted, corn

cut before glazing was 67 per cent digestible, and in ten experiments corn cut after or at glazing was 74 per cent digestible.

As corn approaches maturity there is less fibre and more nitrogen free extract. In other words, the food value increases with maturity. Note the composition of an experimental acre of corn silage:

Tassel	139	240	514	654	72
Silk	201	437	873	1399	168
Milk	232	479	1262	2441	229
Glazed	302	644	1756	4240	260
Mature	364	678	1734	4828	314

It is evident that southern varieties which reach only the silk stage of maturity cannot compete in food value per acre with earlier types of corn. Maturity influences the chemical composition as to acidity, content of protein and carbo-hydrates and fats. Fairly mature corn furnishes more dry matter per acre, there is less fermentation in silo, less labor cost, greater palatability because less acidity, and it has superior composition of greater digestible material.

Cost of Filling Silo

At the Essex County Agricultural School costs on harvesting corn in 1925, four days of eight hours showed \$63.80, twelve acres. Some lodged and had to be cut by hand.

In 1926 eleven acres cost \$64.70 for harvesting. The driver furnished machine, horses, twine.

The filling took four days in 1925 and cost \$100. This covered use of blower, engine and operator. In 1926 the cost was \$122 for five and one-half days.

F. C. S.

IT PAYS TO GRADE AND PACK

New England apple growers need to pay more attention to the grading, packing and marketing of their apples. During the past two seasons, New England grown, graded and packed A 2½ McIntosh sold at a substantial premium over Extra Fancy Jonathan and Winsap apples from the Northwest.

Short apple crops have usually been accompanied by high Baldwin prices as in 1921 or 1919, and large apple crops have resulted in low Baldwin apples as in 1914 or 1916. There is more to be gained, on the average, by storing apples in seasons of small U. S. crops than in seasons of large U. S. apple crops.

C. M. W.

PLOW UNDER OR PULL UP AND BURN ALL CORN STUBBLE BY DECEMBER 1

Section 31A. In any town or part thereof in which an order issued under the preceding section in connection with the suppression of the European Corn Borer shall be in effect, every person in possession of land on which corn of any kind has been grown, shall, not later than December first of the year of its growth, plow, or cause to be plowed the field in which it was grown, so as to bury the stubble to a depth of at least six inches, or pull up said stubble or cause it to be pulled up and destroy it, or cause it to be destroyed, by burning, and every person having in his possession corn stalks shall, not later than April tenth of the year following that of their growth, completely dispose of such corn stalks by using them as fodder or by burning them. Whoever violates any provision of this section shall be punished by a fine of not less than twenty-five nor more than five hundred dollars.

HEAVY TEAMS BEST

At the Topsfield Fair the pulling contest for team horses whose weight was over 2800 pounds was won by the Essex County Agricultural School team. These horses, Fred and Bessie, have a combined weight of 3500 pounds. As the School did not enter the contest for money, the prize of \$25.00 went to Mr. George Harrigan of Hamilton.

These horses, while large ones of the Percheron type, are farm horses, working at any horse work that comes up on a general farm. After using these, as well as other horses of nearly equal weight, contrasted with the proverbial 1200 pound and 1300 pound horse, we find that the heavier horse does his work easier, with less friction than the lighter horse.

With the use of heavy farm machinery and the lack of the roadwork of the past, the lighter 1200 to 1300 pound horse is doomed. The 1500 to 1800 pound horse will take his place.

H. P. T.

RURAL LIFE AT THE CROSS ROADS

Is the farmer to slip back into peasantry or will he gain that economic freedom which is necessary if he is to take his full part as a citizen in these days of big business? This question is discussed by Macy Campbell's new book entitled "Rural Life at the Crossroads" published by Ginn and Co., Boston.

HOME DEMONSTRATION AGENT

HAT BLOCKS MAY BE MADE OF NEWSPAPER

Essex County Extension Instructor Finds Them Inexpensive, Durable and Easily Made

Mrs. Edwin Snow of West Peabody, the Essex County millinery instructor, has been very successful in making the felt hat which is so inexpensive and yet attractive. In the following paragraph Mrs. Snow gives complete directions for making the felt hat block used for moulding and pressing the hat.

Cut about fifty sheets of newspaper into quarter-inch strips. Cover with water and boil until soft (this will take twelve hours or more).

Cut a piece of zinc or tin twenty-seven inches long and seven inches wide. Mark on this a line to denote your head-size, and a line one and one-half inches beyond the line denoting your head size, as the mold will shrink this amount in drying.

Make of the zinc a cylinder one and one-half inches larger than your head-size by pinning a piece of tape around it top and bottom. Tape, which will not slip, is much better than string.

When the paper is soft and is cool enough to handle, press some of it as hard as possible into a flat bottom soup plate, which will act as a mould for what will be the top of the hat block. When as much paper as possible has been used, place zinc cylinder on plate and continue pressing in the paper as hard as possible until the cylinder is full.

Then pour off all the water, take off the zinc, lift from the plate, and pat with a spatula or knife to mold into shape. A rounding top and edge to the block is desirable for this fall. Place the block where it will dry as quickly as possible (usually it takes three days).

Two or three times the first day place the zinc around the block and squeeze it until it is brought in to your head-size.

It is well to give the block one coat of shellac and one of valspar, although this is not necessary unless it is to receive constant use.

The block is useful for the pressing of many kinds of felt hats—those with a crown tip, side crown, sections, or a "tea cozy" shape. Felts should be dampened and pressed on the wrong side.

An attractive hat with seamless crown may be made on this block. Dip a square of felt in very hot water and

quickly put over the block and draw down tightly all around, pinning or tacking at the bottom edge. Press and leave to dry. Before removing it from the block, sew a tape around it so that it will not stretch beyond head-size.

HOMEMADE FELT HAT BLOCK



Good Looking Hats Can Be Formed On Simple Equipment Made from Waste Paper. Directions on This Page

'ROUND ABOUT THE COUNTY IN OCTOBER

Andover—Under the leadership of Mrs. Vernon Walker, chairman of the community service committee of the Women's Club, a group of sixteen women have been organized for the study of food selection with the Home Demonstration Agent. The Episcopal Parish House makes an ideal meeting place. Mrs. James Feeney is organizing another group to meet in March for the study of nutrition.

Amesbury—Two groups are meeting in Amesbury. One group is making most attractive woolen dresses with Mrs. McIntire. The other group is making the popular and practical felt hats with Mrs. Snow. Mrs. Manning is town chairman. Home nursing comes later.

Danvers—Danvers women are interested in millinery. Four communities are represented in the class which is held at the School. In this group we find one minister and two minister's wives. Woolen dresses will be made in January. Mrs. Conant is community leader.

Essex—Essex, one of the newer communities to extension work, held

the first clothing clinic in the county. Dresses, suits and coats which were out of style or out of shape were brought to the all-day meeting and Mrs. McIntire gave helpful suggestions for remodelling. We wish we could have pictures "before and after." Mrs. Elwell is town chairman.

Saugus—The women of Saugus seem to realize that the homemaker's job is not only to clothe the family well, but that fine clothes need a healthful body. Twelve women in the Blueridge section meet in the homes for the study of nutrition. A simple meal is prepared at noon. Cliftondale started with a clothing clinic and followed that with an eight-lesson course in renovation.

Child feeding will be the subject of two meetings in Cliftondale. Miss Foley, the state nutrition specialist, conducts these meetings for the first time. Mrs. Hayden is town chairman.

Hamilton, Wenham, Ipswich and Essex—A group of twelve local leaders are meeting at the Hamilton Community House with Miss Cooley, the state clothing specialist. They are giving back this information to eighty-six other women. This is real extension work.

South Groveland—Attractive woolen dresses and felt hats are coming from South Groveland. Home nursing will be their next interest. Mrs. Hallock is town chairman.

West Boxford—Out of the attic came the coats and dresses to the first clothing clinic. The nutrition group served the community meal at noon.

Plans are being made for the renovation of furniture in the near future. Mrs. Andrew is town chairman.

Rowley—The Rowley women are busy recaning their chairs as their first step toward renovation of furniture. This group was organized by Mrs. Hodgdon.

Two hundred and fifty-six home-making bulletins have been sent out to those requesting them at Topsfield Fair.

"It would probably be within bounds to say that there is at least ten times as much intelligent attention being given now to a study of the physical, intellectual, social, and moral development and well-being of childhood and youth as was the case two decades ago in our country."—The Child—His Nature and his Needs.—Children's Foundation.

"Health flows from life as a by-product of correct living."—Dr. Jesse Williams.

4-H CLUB



DEPARTMENT

OUR MOTTO—"TO MAKE THE BEST BETTER"

4-H CLUB EXHIBITS

AT TOPSFIELD

John Contos of Newburyport Wins
Tioga Cup for Best Pen of Birds

Topsfield Fair was certainly a success as far as 4-H Club work is concerned. Our exhibit was one hundred per cent better than last year. The quality of products exhibited was much better, the quantity was, in the Vegetable Department especially, considerably larger.

As one wandered down the center aisle, the Handicraft exhibit of No. 9 School, West Newbury, first attracted the eye. What made this exhibit noticeable were the bookcases, birdhouse, feed hoppers and other useful articles all made by boys and girls under 15 years of age.

We continue down the aisle and see the dresses and other clothing articles. These represent the work of some of the girls in the Clothing Clubs.

Then staring us in the face is the work of the Canning Clubs. Vegetable, fruits, salads, chicken, vegetable combinations, jams, jellies, conserves, practically every sort of a canned fruit or vegetable that is possible.

Now we come to the products of the Garden Clubs. Here we see all sizes, shapes and colors of the various vegetables from beans to watermelon. Noticeable among the vegetables were the 20 plate exhibits of potatoes and the 25 plate exhibits of cucumbers.

We could not pass by the Forestry sample boards without remarking that 4-H Club work must mean something to these boys and girls to make such wonderful collections of woods.

There was very keen competition in the Poultry Department, especially in the Rhode Island Red pen class. John Contos of Newburyport was first. This same pen won the Tioga Cup for John.

Charles Nason of Ballardvale had not only the best Rhode Island Red cockerel but the best cockerel in the junior show and won the Tioga medal.

Horace Shute of West Newbury carried off the Tioga medal for the best pullet. His Barred Rock won first in the class and first in the junior exhibit.

Carl Sawyer of Danvers carried off the Quimby cockerel for the best display of Rhode Island Reds.

On Saturday, the last day of the Fair, there were three judging contests, all of which were won by 4-H Club members.

Gertrude Colby of Newbury was first in the vegetable judging contest.

Helen Burke of Beverly was first in the clothing judging contest.

Anita Muccioli of Beverly was first in the canning judging contest.

ASK ME ANOTHER

1. What town or city in Essex County had the largest number of 4-H Club members during the winter of 1926-27?

2. How does a 4-H Club get along without a leader?

3. Do you know that 4-H Club work needs men and women for leaders?

4. Who has charge of 4-H Club work in Essex County?

5. Is there a 4-H Club in your community?

NOW I WILL TELL YOU

1. The city of Beverly had the largest 4-H Club enrollment for the winter of 1926-27, but—

2. The Clubs could not get along without a leader as we all know that young people need adult supervision.

3. Miss Parker and Miss Wales of Beverly both know that 4-H Club work needs leaders. That's why they are the leaders in Beverly.

4. The person who wrote this page has charge of 4-H Club work in Essex County and his name is Robert B.

CONFERENCE OF 4-H CLUB
LEADERS AT THE SCHOOL
SATURDAY, NOV. 12

Four-H Club leaders of Essex County are to have their annual conference on Saturday, November 12, at the Essex County Agricultural School.

This conference is to be under the direction of the County Club Agent, R. B. Ewing, and he is to be assisted by the Assistant State Club Leaders, Miss Forbes and Mr. Howe.

Several important problems will be discussed, but the most important ones will be those of the individual leaders. We are planning to have a large attendance this year and expect at least one leader from every community where 4-H Club work is carried on.

Part of the program will be devoted to singing and the playing of games. We cannot expect Club members to know how to sing and play if we do not know ourselves.

Both Mr. Howe and Miss Forbes will be on hand to tell us how we can carry on Club work successfully and how to help each boy and girl get the most out of the 4-H Club work.

Ewing, Club Agent, Hathorne, Mass.

5. This last question is entirely up to you. It can be answered in two ways. Which way are you going to answer it?



ESSEX COUNTY 4-H LEADERS AND CHAMPIONS AT CAMP GILBERT, 1927

Left to Right—Evelyn Ray, Harold Bilodeau, Helen Burke, Mr. Silas Little (Leader), Florence Fielder, Miss M. Smith (Leader), R. B. Ewing (Club Agent), Elizabeth Shay, Betsy Cairns, Mrs. L. Jordan (Leader), Arnold Bilodeau, Olin Donnelly.

THE STORY OF A 4-H CLUB BOY

Horace Shute of West Newbury, member of the graduating class of E. C. A. S. gave the following account of his work over the radio at the Convention of the Vegetable Growers of America.

Four years ago while a student in High school, I became interested in club work through a talk by a county club leader. That year I started in with 50 hens. The next year I enrolled as a student at the Essex County Agricultural School in order to gain a clearer and wider knowledge of scientific agriculture. At the school and through the county club leader, I was encouraged to better my project. That year I raised 300 chicks and had an acre of land planted to vegetables. Half of the chickens were pullets which I kept over the winter and the following spring.

For my work I was proclaimed county champion and honored by attending the State 4-H Club Camp at Massachusetts Agricultural College. During the next year I raised 700 chickens and had a garden of two acres. In the fall I was a delegate to the Brockton Fair.

Last year I raised 1,500 chicks and had three acres of garden crops. I housed 400 hens last winter. I was a delegate to the Eastern States Exposition at Springfield, Mass., and to the Brockton Fair, where I competed in the judging contests for a scholarship prize.

This year with an increase in capital from my previous projects, I have enlarged this year's project considerably. I am raising 5000 chickens and have five acres planted to vegetables. During the last three years I have won several prizes in agriculture offered by the residents of Essex County. I am now at the Vegetable Growers Association in Syracuse as a member of the Massachusetts Demonstration Team and as a vegetable judge. I have been a community club leader for the past two years, and this year two of my club members were at the state camp of Massachusetts as county champions.

4-H Club work has helped me more than I can express in words. It means and has meant much to me during the last few years. I think every boy and girl in the United States and even the older folks should be taught the value of club work and become interested in it.

What do the 4-H's stand for? Head, heart, health and hand. I pledge my head to clearer thinking, my heart to greater loyalty, my health to better living and my hands to greater service for my club, my community and my country—(Reprint from Market Growers' Journal Sept. 15, 1927.

"IT'S AN ILL WIND THAT BLOWS NO GOOD"

The soil is the most precious gift of nature, and it takes much wisdom both to use it well now and also to preserve it for the use of future generations.

Be one of the wise farmers who assist nature by fall plowing.

Clayey soils, if not liable to puddle, are benefited most because it exposes them to weathering.

Sandy soils, if low in humus, may be greatly injured by fall plowing, because they are already too leachy.

An advantage of very late fall plowing is that it destroys wire worms.

Farmers who have corn stubble that must be plowed under to help corn border control are really "killing two (or three) birds with one stone."

E. E. M.

ROADSIDE STAND ASSOCIATION ORGANIZED

The Essex County Roadside Stand Association was organized about two months ago with the following officers:

Melville Grey of Wenham, President; Harvey Turner of Andover, Vice-President; C. M. Stearns of Danvers, Secretary and Treasurer.

The exhibit, which was in the Vegetable Building at the Topsfield Fair, was put up by members of this Association and all the products which were exhibited, were given by the members of the Association. At the present time, there are ten members in Essex County and all belong to the State Association as well. If anybody is interested in such an Association, they may get in touch with any of the officers.

C. M. S.

SUCCESS OF "AGGIE" STUDENTS

Continued from page 1

Joseph Finnochio took fifth place judging vegetables and third place in judging poultry at the Worcester Fair, September 28. Arthur Gordon won sixth place in judging vegetables while Horace Shute was placed seventh in judging poultry in a field of thirty-three contestants.

The last Fair of the season was at Brockton where five of the Essex Aggie students were among the thirty-eight contestants who took part in vegetable and fruit judging. Thomas Gould took first prize in judging vegetables. In the fruit judging very keen competition resulted when there were three tied for first place, one of the three being Nathan Hale of Essex Aggie. There were also three tied for second place, one of them being Joseph Finnochio of Essex Aggie. In order to work off the tie for first place in the fruit contest, the three students were required to give their reasons for the plates of apples being judged and the first place winner to be picked

INTER-CLASS TRACK MEET

Nathan Hale of Rowley, Highest Point
Winner, Robert Mooers of
Haverhill, Second

Summary of Girls' Events:

Girls' All Up Relay—Won by the Sophomores. The team consisted of Misses Maunula, Stott, Murray, Burton, McGlew, Pohju, Connelly, Nichols, Bubier and Curtis.

Girls' Baseball Throw—Won by Ida May Perkins; second, Alice DeCraney; third, Helen Belanger. (142' 6")

Girls' Dodge Ball—Won by the Sophomore girls, (49 sec.) Seniors second.

Girls' Relay—Won by Sophomore girls.

Girls' Basketball Relay—Won by the Sophomore girls.

Summary of Boys' Events:

Boys' 100-yard Dash—Won by Hale; second, W. Shiers; third, Mooers. (113/5)

Boys' 220-yard Dash—Won by Hale; second, tie, Henderson and Mooers. (25 4/5 sec.)

Boys' High Jump—Won by Moulton; second, tie, Fuller and Woodman. (4' 11")

Boys' 440-yard Dash—Won by A. Henderson; second, Nelson; third, Swiniarski. (57 2/5 sec.)

Boys' Mile—Won by W. Shiers; second, Robert Mooers; third, Corners. (5 min. 27 1/2 sec.)

Boys' Shot Put—Won by Wilson; second, Batchelder; third, Danforth. (32' 8 1/2")

The leading scores for the boys were : Hale (11 points), R. Mooers, (10 1/2) and W. Shiers (7 1/2).

Scores by Classes—Seniors, 65; Juniors, 31; Sophomores, 40 1/2 and Freshmen, 2 1/2. Score by girls—Senior, 23; Sophomore, 24. Scores by boys—Seniors, 42; Juniors, 31; Sophomores, 16 1/2, and Freshmen, 2 1/2.

Nearly 1,000,000 pounds less tea was imported into the United States in the last fiscal year than in the preceding year, according to the report of the tea control laboratory of the food, drug, and insecticide administration.

American-born boys of American-born parents are today taller than boys fifty years ago by two inches.—Nation's Health.

by a committee of three professors at Massachusetts Agricultural College. In this elimination contest Fred Taylor of Littleton won first place honor.

These students at Essex Aggie who have taken part in the various contests this fall, have made a name for our School and credit is due them for their splendid results; also to Instructors Wood and Stearns who coached the boys in judging fruits and vegetables.

C. M. S.

ALUMNI NOTES

Class of 1920

AGRICULTURAL

Cassano, Joseph, teaching agriculture and science, Wakefield High School. Married.

Henderson, Harold H., propagator at Cherry Hill Nursery, West Newbury.

Ives, Leonard B., Lafayette Street, Salem. Superintendent on Gove Estate. Married Ruth M. Dawkins.

Killam, Dana, R. F. D. Topsfield. General farm work on home farm. Married Rachael Foster '20. Three children.

Lynch, Edward F., Box 7, Arbor Street, Wenham. Truck driver for J. D. Barnes of Wenham. Engaged.

MacDonald, Alexander A. F., 20 Wisteria Street, Salem. Greenhouse foreman.

Osborne, J. Roy, East Street, Middleton. Fruit farmer. Married Grace B. Hartman '20. One son and one daughter.

Poore, Calvin E., Melhurst Farm, Melrose, Conn. Farm manager. Married and has one son.

Sargent, Winthrop E., R. F. D. No. 9, Fairfield, Conn. Superintendent on private estate. Married Margaret B. Wallace '20. One daughter.

Tucker, F. Maynard, 86 Wheeler Street, Gloucester. Market gardening. Married and has one son.

Wood, Ruth M. (Mrs. Sarkis P. Kafafian.) Teaching.

HOMEMAKING

Foster, Rachael F. (Mrs. Dana Killam.) East Street, R. F. D. Topsfield. Has two daughters and one son.

Foster, Mrs. Viola H., Lunenburg, Mass. One son and one daughter.

Gray, Alice B., 209 Atlantic Avenue, Marblehead. Bookkeeper with New England Mutual Life Insurance Company.

Lewis, Helen M., 90 Shawsheen Rd., Andover. Housekeeper.

Ramsdell, Carrie J. (Mrs. Roland M. Roberts, 7 Mechanic Street, Marblehead.

Richards, Laura E. (Mrs. J. Harold Seeley, 121 Porpoise Way, Portsmouth, N. H. c o Atlantic Heights. Busily engaged keeping house.

Wallace, Margaret B. (Mrs. Winthrop E. Sargent) Greenfield Hill, Fairfield, Conn. One daughter.

NO REPLIES FROM

Brown, Elizabeth (Mrs. Stensrud); Dane, Margaret P.; Fogarty, Amy L.; Foster, Jessie F.; Hartman, Grace B. (Mrs. Osborne); Lyons, Mary S. (Mrs. Mays); Moore, Pauline I. (Mrs. Roger Winch); and Stevens, Myrtle E.

Evans, Benjamin L.; Hersey, Frank H.; Scher, Donald A. N., and Whalen, Edward M.

Class of 1921

AGRICULTURAL

Foley, Horace H., 2 Lincoln Street, Newburyport. Automobile mechanic.

Herrick, Herman F., Topsfield. Estate work on Thomas E. Proctor's Estate. Married Janet Carson of Foxboro.

Lee, Philip A., Waldoboro, Maine. Operating own poultry plant.

Lord, James R., R. F. D. Barnstead, N. H. General farm work.

Moreland, Wallace S., Conn. Agricultural College, Storrs, Conn. Teaching in Poultry Department of the College.

Wood, James A., 16 Brackenbury Street, Beverly. Electric meterman for Beverly Gas and Electric Company.

HOMEMAKING

Anderson, Gladys G., 131 High Street, Danvers. Milliner, R. H. White Company. Also a 4-H Club Leader.

Bowen, Ruth L. (Mrs. A. Gordon Lord), 35 Canada Street, Lowell. Busily engaged keeping house.

Glavin, Marjorie L. (Mrs. Kenneth Briggs). Has one son.

Israel, Gertrude A., 23 Popes Lane, Danvers. Training in the Bloomingdale Hospital, Worcester.

Murphy, Eleanor E., 50 Prospect Street, Georgetown. Teaching in the South Primary School in Georgetown.

Pierce, Helen D. (Mrs. Arnold Brown), 7 Pierce Street, Marblehead. Married a former "Aggie" student. Has one daughter.

Woodworth, Bertha, 88 Gardner Street, Groveland.

Wyman, Ruth E. (Mrs. Roland Smith), 43 Falmouth Street, Lawrence. Housekeeping.

NO REPLIES FROM

Barrett, Helen L.; Batchelder, Ruth (Mrs. Frank Bartlett); Currier, Olive B.; Flynn, Esther P.; Ham, Hope; Horne, Lillian M. (Mrs. Norman Johnston); MacKenzie, Edna V.; Norton, Adelaide; Pearson, Marjorie; Stanley, Janet E.; and Walker, Esther J. (Mrs. Russell A.)

Hammers, Ralph L.; Hennessey, John W.; Jackson, Alfred H.; Nelson, Harold E.; Phipps, Carl D.; Rogers, James L. and Vratatos, Charles G.

Class of 1922

AGRICULTURAL DEPARTMENT

Allen, Elbridge S., 8 Bailey Street, East Lynn, Mass. Wire Chief's Clerk and Line Assigner for N. E. Telephone and Telegraph Company. Married, one daughter. Still interested in agricultural opportunities.

Bryer, I. Alfred, Lowell Road, R. F. D. No. 1, Andover. Herdsman on American Woolen Company's farm. Married. One son.

Caverly, C. Gardner, High Street, Ipswich, Mass. Landscape gardening for himself.

Garland, George E., Prospect Hill Road, Andover. Has own poultry and small fruits farm.

Hansen, Harold L., 15 Giles Avenue, Beverly. With the United Shoe Machinery Company.

Holten, Harold W., 115 Lynnfield Street, Peabody. Tester for Essex County Cow Test Association with headquarters at the School.

Jones, Everett A., 43 Churnook St., Beverly. Herdsman on Chedco Farm in Berlin, Mass.

Knight, Russell W., 53 Pond Street, Marblehead. Fruit work.

Morris, Fred G., 36 High Street, Ipswich. Working on the Argilla Farm, Ipswich.

Peabody, Philip F., P. O. Box 1076, North Warren, Pennsylvania. Farm Manager, State Hospital Farm.

Pollock, Robert W., Breeze Heights, R. F. D., North Brookfield. Running general farm for self.

Sargent, Oliver D., 7 Lake Avenue, Haverhill. Greenhouse work in Haverhill.

Stevens, Raymond L., Baldwin Road, Marblehead. Gardening.

NO REPLIES FROM

Peach, Daniel A.; Severance, Marion; Sverker, Carl M.; Wainwright, Thomas, and Welch, Thomas W.

HOMEMAKING DEPARTMENT

Brown, Frances, 9 Essex Street, Danvers. Cooking and general work in a private family.

Hanson, Marion, 14 Giles Avenue, Beverly. Nursing.

Harrigan, Dana, Marjorie O., 578 Newbury Street, Boston. Training at the Deaconess Hospital.

Hazel, Virginia O., 485 Chatham Street, Lynn. Cashier with R. S. Bauer Company.

Larrabee, Marion, 27 Arthur Street, Beverly. Training at the Beverly Hospital.

Likbey, Margaret M., 8 Summer Street Court, Nahant. Saleslady in dry goods store.

Martin, Gertrude B. (Mrs. Howard) Borderline Poultry Farm, Middleton. Keeping house and assisting with the poultry work.

Pitman, Bertha B. (Mrs. Harold E. Proctor) 43 Allyn Avenue, Waverly. One son.

Rewell, Addie, 37 Dwinells Street, Groveland. Student at Framingham Normal School, working for a degree.

Stillings, Veneta Margaret, (Mrs. Harold J. Coburn, 11 Central Street, Saugus. Housekeeper. One son.

Tufts, Lena M., Willow Brook Farm, Harvard, Mass. Living at home.

Whittier, Bernice V., 10 Linden Street, Ipswich. Working in Salem.

Wilkins, Gertrude M., (Mrs. Clarence J. Castle) Lock Box No. 32, Topsfield.

NO REPLIES FROM

Brown, Kathryn; Buck, Esma; Currier, Doris F.; Estey, Florence S.;

HOMEMAKING DEPARTMENT HAS LARGEST ENROLLMENT IN ITS HISTORY

Slogan of the Department—"Better Homes for Essex County"

The number of students in the Homemaking Department is the largest in its history, ninety-seven being enrolled to date.

When the first class of ten were enrolled in the old Mansion House, so called, they little realized that they were the nucleus of a school that would be housed in the present attractive building at the south end of the campus. The Department has been in existence for 14 years and during that time has been housed in several places. After the Mansion House burned, the girls occupied the building on the opposite side of the street and many of the alumnae have many happy memories of the "little red house." The house was later painted gray but was still the happy "home" it had always been. Then came the fire with its two-fold result. First, it meant many a heartache to those who loved it for old association sake, but it also meant a new commodious building. For two years the girls and teachers very cheerfully endured the inconveniences of having a part of their class work in the lower part of the old building and part in the Agricultural building. Sometimes when the rain was falling or the snow blowing, it seemed quite a journey from class to class, but no student wavered and the two years passed successfully.

This year begins the second in the new building and the increase in enrollment is an indication of the place which the study of Homemaking is taking in Essex County. "Better Homes for Essex County" is the watchword and the graduates are living up to their training.

Ida Kirby of Beverly, a member of the freshman class, was a delegate to Camp Gilbert as a prize winner in the 4-H Club. She spent a very enjoyable and instructive week.

HOMEMAKING PROJECTS IN COMPETITION FOR BAUER AND OTHER PRIZES

Much interest is being shown in prizes offered by Mrs. Ralph Bauer for excellence in summer projects. There are many outstanding ones in this year's group.

Ruth Curtis of Boxford, was a cook at Happy Health Camp at Georgetown; Doris Montrose of Lynn, had charge of the lunch room at the Lynnfield Country Club; Rita Senior of Byfield, worked for Mrs. Melvin Gray, and Annabelle McLelland of Beverly, assisted in caring for children and doing chamber work at Manchester-by-the-Sea.

Florence Howard of Lynn, spent her summer in Atkinson, New Hampshire as mother's assistant in a family where there were three small children. Miriam Whedon of Danvers, lived at the old James Putnam house and did a great deal of canning as well as the many other things necessary to keep that historic old house in order.

Viola Messer of Methuen, had a home project and did sewing, cooking and canning. Helen Lendall of Danvers, assisted at the J. B. Thomas Hospital in Peabody and Evelyn Philbrick of Middleton and Emily Jordan of Amesbury, were efficient waitresses at the Sawyer House, Rye Beach. Esther Perkins of Newburyport and Alice DeCraney of Lynn, had very interesting projects.

Gertrude McCormick Prize

Home furnishing and home decoration are subjects in which the students receive instruction in the Homemaking Department and the Gertrude McCormick Prize for the best project in home renovation is receiving much attention. There are several candidates.

Alumni Prize

The student who is to receive the prize offered by the alumni for the greatest improvement in academic subjects has not yet been chosen.

GRADUATION

Continued from page 1

Newbury; Perley, Palmer S., Rowley; Ray, Russell W., West Newbury; Robator, Lionel, Haverhill; Scully, Joseph A., Lawrence; Sewell, Cliffield G., Lynn; Shute, Horace J., West Newbury; Sproull, Robert W., Newbury; Stone, Curtis L., Danvers; Tibbetts, Clarence A., Amesbury; Veiner, George, Saugus; Walker, Frederick H. Jr., Marblehead; Wood, Paul S., Beverly; "Buhle, Henry J., Beverly.

Homemaking Department

Baillie, Katherine, Andover; Colman, Grace L., Merrimack; Fellows, Lydia T., Peabody; Flint, D. Arline, Andover; Griffin, E. Doris, Rockport; Hurd, Iona T., Georgetown; Hutchinson, Elizabeth, Nahant; MacWilliams, Dorothy J., Newburyport; Montrose, Marjorie D., Lynn; Sullivan, Kathryn M., Danvers.

Special One Year Course or High School Specials

Bradley, Beatrice H., Danvers; Bramley, Isabel G., Lawrence; Churchill, Marion E., Gloucester; Devens, Nettie E., Amesbury; Donahue, Dorothy M., Lawrence; Emmett, Evelyn L., Saugus; Hilbert, Gladys M., Lawrence; Marshall, Elinor T., Rockport; Mooers, Evelyn V., West

MAY E. FOLEY, STATE NUTRITION SPECIALIST GIVES VIEWS ON RELATION OF FOOD TO DISPOSITION

"Nagging wives need a doctor. It is illness, not ill temper that is responsible," is a statement recently made by a well-known London physician. "It is the unhealthy woman who nags," he explained. "It is not her fault; she is improperly fed."

Irritable dispositions, bad tempers, listlessness, or apparent laziness in children are often caused by poor food and lack of rest. The well nourished child is sturdy, has glossy hair, bright eyes, good color in cheeks and ear lobes. He stands erect, has straight bones, flat back and a well rounded chest. His teeth are strong and white. He is enthusiastic, active, energetic and enjoys life.

Nervousness, irritability and a chronic tired feeling are likely to be signs of improper nourishment or poor food. Narrow, flat chest, bow-legs, poor teeth and shoulder blades that stick out like wings show that bone building foods have been lacking in the child's diet. Such a child is usually thin, with pale, flabby flesh. His eyes may have dark circles under them and his expression is probably dull.

Plenty of milk—a quart a day—fruits and vegetables twice a day, and whole grain products at least once a day insure the right kinds of building materials. If combined with these foods a child gets plenty of rest, sunshine and fresh air, there is little danger of undernourishment.

MAY E. FOLEY,
State Nutrition Specialist.

Class of 1922 Continued from page 7

Estey, Ruby H.; Fergusson, Rebecca E.; Jordan, Freda S.; Littlefield, Edith B.; Pension, Florence M.; Stanley, Marjorie L.; Taylor Charlotte I. and Upton, Grace L.

Note to Alumni:—We are anxious to have a complete Alumni Directory. This cannot be accomplished without your help. We would like to hear from those who are listed under the head, "No Replies From."

Boxford; Norman, Ruth M., Ipswich; Walker, Ruth B., Methuen Weinstein, Rose, Peabody.

The Alumni are taking a very active interest in all parts of the program. The Association will observe the day by the customary exercises including business meeting, banquet, reception and dance.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 9

HATHORNE, MASS., JANUARY, 1928.

No. 1

DAIRYMEN START PROGRESSIVE PROGRAM

Increased Indemnity Bill Approved by All, Including Consumers' Committee

After a thorough study of the situation in the county, a meeting for dairymen was called at the Aggie School to discuss the problems. It was a rainy day but about thirty attended. The replacement question was deemed very important. Some thought raising calves cheapest and best method. But danger of T. B. unless tested was great. Then this whole subject was discussed. It was universally felt that the average dairyman in Essex County could not afford to test under the present indemnity law. But the proposed Bigelow Bill and local municipal ordinances are in the offing. Lynn, Swampscott, Ipswich and lastly Haverhill have joined the local ordinance method of forcing dairymen to test or pasteurize. It was voted that the chair appoint a county committee to study this question.

County Committee

Chairman Moxley, president of the Cow Test Association, appointed the following committees: John Chadwick, Boxford; Albert Elwell, Sr., Byfield; Andrew Longfellow, Groveland; Robert MacKenzie, Ipswich; Maynard W. Lane, Ipswich; Rudolf Messerli, North Andover; Herbert Carter, Andover; Dr. William J. Greenler, Georgetown; Ralph Gaskill, Danvers; Winthrop Gleason, Haverhill; George Kinney, Amesbury; Willis Bartlett, Salisbury; C. S. Harrison, Newbury; Frank Prentiss, Danvers; George Hooper, Danvers; C. F. Skillings, Saugus; J. L. Carten, Peabody; Leon Brown, Lawrence.

This committee met at Topsfield, November 3. County Agent Smith outlined the declining dairy situation, emphasized the replacement problem and T. B. costs of production, and need of co-operation between consumer and producer. Professor Branch of Amherst gave cost figures on raising calves, showed about \$175 to \$200. Buying replacements costs about the same and had the added dangers of abortion and T. B. and the uncertainty of producing ability. But Professor Fawcett of Amherst showed that it would be folly to recommend to Essex County dairymen to raise calves only to have them slaughtered by a Compulsory T. B. law.

Ralph Gaskill emphasized the immediate need of getting in touch with local municipal authorities and hold them in abeyance until the dairy program can get under way.

The following resolution was passed: "Whereas the dairy industry of Essex County has been steadily declining during the past few years, and due to an increase in the value of milk cows since the present indemnity law was passed, and the present price of cows is so much higher that the owner of the better grade herd is prevented from submitting his herd to the T. B. test because of the unusually high risk of great financial loss and probable long wait for his indemnity:

Resolutions

"Therefore, be it resolved: That we, representative dairymen of Essex County and members of the Essex County Dairy Committee, do favor the passage of a law by the Commonwealth of Massachusetts providing an increase in indemnity of \$25 per head on grade cows above the present law, and a proportionate increase on pure bred;

"And be it further resolved that we favor legislation providing a sufficient increased appropriation to handle all cattle slaughtered by officials of the Commonwealth without requiring the herd owners an unnecessary wait for his remuneration;

"And be it further resolved that we favor a law providing 6% interest be paid to herd owners on unpaid claims from sixty days after cattle are tested until claim is paid."

Motion was passed that the chairman appoint committees on Legislation, Co-operation, Organization and Arbitration.

Chairman Moxley after deliberation has appointed the following committees: Organization, Albert Elwell, Andrew Longfellow, Robert MacKenzie, M. W. Lane, George Kinney, Willis Bartlett, Melville Grey, George Hooper, C. D. Abbott, Robert Sawyer.

Co-operation—Herbert Carter, Ralph Gaskill, Harvey Turner, J. N. Dummer, Mrs. Fred A. Smith, Stuart Little, Dr. E. W. Babson, Frank Prentiss, F. Leon Brown, Chairman F. A.

(Continued on page 3)

FRUITS OLD AND NEW Other New Tree Fruits

The importance of the apple far exceeds that of all the other tree fruits in Essex County. There was once a time when Essex County was famous for its pear orchards. Many of the new varieties either originated or were grown to great perfection in this section. Delicious peaches bore abundantly and were a promising fruit until the disease "peach yellow" destroyed so many trees. With the attractive new varieties of quality fruits now coming available, it would seem that the commercial orchardist and the home gardener might well re-establish their home orchards.

Peaches and Nectarines

The number of standard varieties of peaches has dwindled seriously during the last score of years. Through the work of private individuals and the Experiment Stations, notably the New Jersey Agricultural Experiment Station, we are about to enjoy a wide list of varieties. Many of these are early peaches destined to fill our markets at about the period formerly supplied by the Carmen, Greensboro, Champion and Bell. These new varieties are beautiful in appearance, of excellent size, color and quality, all that could be desired. Varieties worth noting are Pioneer, Cumberland and Golden Jubilee. These varieties should be valuable for roadside stands. Considerable work is now being done with nectarines. The nectarine is a smooth skinned fruit resembling the peach in all characteristics except skin cover. There is undoubtedly a most attractive future for this new class of fruit. Hunter is the name of one variety which appears to be valuable.

Cherries

The prevalence of the black aphid or louse and the depredations by birds have somewhat discouraged the orchardists in attempting to grow cherries. The writer remembers when nearly every garden contained one or more productive sweet cherry trees and these were many times supplemented by sour, cooking cherries. We are now able to control the black louse successfully and some gardeners are able to save a crop from the birds. In the new, sweet cherries, Seneca, a variety which originated at the New York Experiment Station, appears to

(Continued on page 2)

Essex Farmer and HomeMaker HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

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CALENDAR

- Dec. 16 Christmas recess begins.
- Jan. 3 School re-opens.
- Jan. 3-7 Poultry Show in Boston.
- Jan. 4-6 Union Agricultural Meeting in Worcester, Mass.
- Feb. 16 Chebacco Pomona Field Meeting at the School.
- Feb. 27-Mar. 5—Recess for the Home-making Department.
- Mar. 14 Annual Farmers' and Homemakers' Day, at the School.

WINTER MEETINGS

We sometimes wonder if the farmer and his family are getting the full benefit of the agencies placed at his disposal for improving or advancing him in his business. The winter season should furnish time for reading, study, conferences and meetings designed to help him with his business. Many times alert individuals get ideas from the public meetings which are invaluable in the operation of the home farm.

Perhaps a little hard study and figuring on the fertilizer or feed problems may result in saving considerable money.

The usual series of winter meetings including the Poultry Shows, the Union Agricultural Meeting and the Annual Farmers' and Homemakers' Day at the School might result in profits to the business far beyond the cost entailed in attendance at one or more of these outstanding meetings.

FRUITS OLD AND NEW

(Continued from page 1)

be a wonderful variety, producing a cherry of good size, beautiful color and quality and ripening several days in advance of black Tartarian. The Abundance, Giant and Bing are other

kinds of large, high quality, attractive, sweet cherries which extend the season through late summer. New York and Pennsylvania produce great quantities of sour cherries for the culinary trade. At the present time vast quantities of cherries are frozen and held in barrels and containers and marketed in that form. It would still seem that there is a place for sour cherries in the home orchard at least. A new variety, Chase, seems to be one worth a trial and together with the old varieties, English, Morrello and Montmorency make a dependable set.

Plums

This valuable fruit has never been properly appreciated and grown by Essex County fruit growers. The chief reason has been because of the low quality of the varieties which have been offered. The Japanese varieties like Red June, Abundance and Burbank have lived with the European types like Lombard, Bradshaw and Moore's Artic, all of which have usually been of such low quality as to fail to attract the user to repeat the experience. There are now varieties in both classes of such extremely high quality as should encourage the home orchardists and possibly the roadside market men to study. Varieties combining extreme beauty, fine size and high quality certainly should place the plums back in the garden. Plums possess elements which warrant more attention in the diet of most families.

Pears

Two outstanding difficulties, namely, fire blight and insect pear psylla, have been largely responsible for the passing of this delectable fruit. We now have varieties of high quality notably Bosc, Seckel and Sheldon. These varieties command excellent prices wherever offered. New varieties combining the best qualities of the Bartlett and the Seckel are now available so that we have fruits of Seckel quality and Bartlett size which extend the season beyond Bartlett time. Two old, high quality pears should be retained, namely Buerre Superfin, which ripens in October and November, and Dana's Hovey, a superior pear, ripening from Thanksgiving to Christmas.

It would appear from the above statements which must, from the nature of the space available, appear more like a catalog list, that there are many attractive varieties ahead for the selective orchardist. The School is working earnestly with a view to assist citizens to obtain information concerning these varieties and with the hope to shortly be able to supply you with some more direct help.

The next article will touch on new grapes and berries.

BASKETBALL SCHEDULE 1928

Jan. 4	Alumni
Jan. 6	At Stoneham
Jan. 13	Norfolk Aggies
Jan. 14	At Gloucester
Jan. 18	Stoneham
Jan. 20	At Swampscott
Jan. 27	At Salem, N. H.
Feb. 3	Bristol Aggies
Feb. 8	Marblehead
Feb. 10	At Norfolk
Feb. 15	Swampscott
Feb. 17	At Bristol
Feb. 24	At Marblehead
Feb. 29	Salem, N. H.
Mar. 2	Gloucester

In addition to the above games there will be interclass games on Wednesday of each week throughout the season. Teams have been organized in the different classes and fully one-half of the student body participate in these contests.

HOCKEY

The hockey squad has met several times and a team will be developed around Danforth, Turner and Haley. Instructor H. L. White has taken charge of the squad.

Schedule of Games

Jan. 7	At Swampscott
Jan. 10	Amesbury
Jan. 13	Ipswich
Jan. 17	Swampscott
Jan. 20	At Beverly
Jan. 24	At Danvers
Jan. 26	Beverly
Jan. 27	At Ipswich
Feb. 3	Danvers

WEATHER REPORT FOR OCTOBER-NOVEMBER

	Oct.	Nov.
Maximum Temperature	87 (1st)	73 (2nd)
Minimum Temperature	25 (31st)	18 (21st)
Avg. Daily Temperature	53.8	45.2
Normal Temp. (Boston)	53.6	42.0
Greatest Change in 1 day	40 (28th)	38 (25th)
Least Change in 1 day	10 (18th)	8 (19th)
Inches of rainfall	4.09	4.49
Normal rainfall (Boston)	3.86	4.10
Total for year to Dec. 1	33.51"	
Deficiency for year to date 6.46"		
Avg. relative humidity 8 a.m.	78.5%	79.6%
Number clear days	13	5
Number partly cloudy days	16	21
Number days without sun	2	4
No. days on which rain fell	9	11
Total hours sunshine	246	129
Per cent. sunshine	71.9	43.7

October was the sunniest month in the history of the weather bureau in Boston and November's average temperature was by far the highest ever reached there. Nothing like the warm sunny weather of September, October and November, has ever been recorded over so long a period at this time of year.

While November was warm it was not nearly as sunny as October.

The rainfall has not yet caught up to normal and it is not likely it will, although the first part of December saw enough rain to equal the normal for the whole month.



EXTENSION SERVICE



DAIRYMEN START PROGRESSIVE PROGRAM

(Continued from page 1)

Smith, Mrs. J. H. Kimball, John Eastwood, Miss Marion P. Crawford, Dr. Olin S. Pettingill, C. S. Moxley, ex-officio.

Legislation—Rudolf Messerli, Dr. William J. Greenler, Winthrop Gleason, John Chadwick.

Arbitration—Herbert A. Ingalls, Rudolf Messerli, Albert Elwell.

These committees are meeting and developing plans for the winter. A circular letter with return post card has been sent to all dairymen in the county. The various committees hope to secure sound advice from these cards. All are urged to fill them out and return.

Some Statistics

The maximum indemnity which a dairyman might receive in the various New England states follows: Connecticut, \$125; Rhode Island, \$100; Maine, full appraisal; New Hampshire, \$100; Vermont, about \$75; Massachusetts, \$85.

The average salvage in Vermont has been around \$23; while that in Massachusetts is \$35. Hence average cow values here are much higher than in Vermont.

"Fake tests" are being eliminated according to Director Cummings. There has been a drop in reactors on first test from 52.8% in 1926 to 26% in 1927, nine months' period. The average percent of reactors on all tests in 1926 was 19.2%.

"Does testing remove the reactors?"

The records for 1927 indicate that it does. First test 26%; second test 7.3%; third test 7.1%; accredited .8%

REPORT OF THE COMMITTEE ON CO-OPERATION

After much discussion this committee, consisting of representatives of the Board of Health, Pomona Grange, Medical Tuberculosis Association, veterinarian, milk dealers, dairymen, Educational system, Federation of Women's Clubs, Home Demonstration Agent, N. E. M. P. A., Dairy Department at the Aggie School, approved of the T. B. resolution, and also approved of an educational campaign on nutritive value of milk. A sub-committee was appointed by Chairman Smith as follows: Doctor Pettingill of the T. B. Sanatorium, Doctor Babson, veterinarian of Gloucester, Miss Crawford, Home Demonstration Agent, and F. C. Smith, County Agricultural Agent, to prepare educational and fact material and furnish each member of the committee with this material; also to provide a Speaker's Bureau to present the agreed point of view to the organization and press of the county.

BROADCAST FROM STATION WBZ MONDAYS IN JANUARY

Home Forum—2:00 P. M.

9th, Miss L. P. Jefferson, Marketing; 16th, Miss E. B. Cooley, Clothing; 23rd, Miss M. E. Foley, Nutrition; 30th, Mrs. H. J. Haynes, Home Management.

Farm Forum—6:00 P. M.

2nd, W. A. Munson, Extension Service; 9th, R. B. Parmenter, Forestry; 16th, J. H. Frandsen, Dairy; 23rd, H. B. Rowe, Markets; 30th, W. H. Thies, Fruit Growing.

COST OF RAISING DAIRY CALVES DETERMINED BY EXPERIMENT

How much does it cost to raise a calf?

That question is one which has always caused considerable thought among dairymen. With this fact in mind, Dr. J. B. Lindsey and J. G. Archibald of the Experiment Station of the Massachusetts Agricultural College have carried on, during the past few years, extensive studies of calf feeding costs. These comparative costs and results of various feeds are reported in Experiment Station Bulletin 223, which may be obtained from the mailing room, Massachusetts Agricultural College, Amherst, Massachusetts.

Following this these men have made a number of tests as to the cost of skim milk powder as compared to skim milk. While slightly more expensive the skim milk powder has the advantage of being in a form that will keep for a long time and is obtainable when liquid skimmed milk is not.

Results based on these tests show that the cost of every pound of gain made by the calves was 18.8 cents for liquid skimmed milk, 19.5 cents for a good calf meal, 22.1 cents for roller process skim milk powder, and 25.2 cents for spray process skim milk.

Methods of preparing skim milk powder for feeding as well as the methods used in that test are described in Experiment Station Bulletin 230. A copy may be obtained from your county agent, Hathorne, Mass.

ESSEX COUNTY COW FACTS

	1924	1925	1926
Milk cows	13460	13070	12800
Average milk production per cow	5890	5869	5771
Total milk production thousand pounds	79279	76708	73869

Importance of Dairying

1925 Census Essex County

1. Dairying value of Dairy Products	\$2,601,000
2. Forage and Hay	1,900,000
3. Gardening	1,492,000
4. Poultry	1,106,000
5. Fruit	898,349

Loss of Cattle Due to T. B.

Division of Animal Industry, Mass.

	1924	1925	1926
Cattle population, state	219042	204163	192777
Number dairy cattle brought into state	17130	21818	20919
Total cattle in state during year	236172	225981	213,696
Actual loss during year	32009	33204	28674
Slaughtered as reactors	6889	7856	6392
Percent slaughtered as reactors to total	2.5	3.4	3
Percent slaughtered as reactors to actual loss	18	23	22

EXTENSION DEPARTMENT HAS FULL TIME HOME MANAGEMENT SPECIALIST

Classes Started in Furniture Renovation and Home Improvement

Mrs. Harriet Haynes, who for several years has been a part-time specialist in Home Management, has now been secured for full time. This means that Essex County women will receive much more help in Home Management problems than heretofore. Do you wish help in renovation of furniture, improvement of the kitchen or the living room? Now is a good time to start classes in these subjects. This instruction is free and open to all. Requests should be sent to Miss Crawford, the County Home Demonstration Agent.

ALUMNI NOTES

Class 1923

Agricultural Department

Anderson, C. Donald—Framingdale, New York. With the N. Y. State Egg Laying Contest doing instructional and extension work in poultry. Married and has one son.

Barnes, Howard L.—55 King street, Swampscott. Does some clerking and has poultry plant at home.

Bergstrom, Eric Hjalmar—150 Jenness street, Lynn. Greenhouse work at home.

Brickett, Paul E.—East Derry, New Hampshire. Poultry and general farming. Married.

Cressy, Alden F.—Three Bridges, New Jersey. Manager poultry plant.

Duncan, James F.—86 Western avenue, Gloucester. Superintendent of Parks in Gloucester. Married. Two children.

Dunnells, W. Winslow—6 Sutherland street, Andover. Printer and salesman.

Ewing, Robert B.—4 Gregory street, Middleton. 4-H Club Agent, Essex County. Married.

Knowlton, Walter S.—Topsfield road, Wenham. Poultry for self. Married.

Maxwell, Wesley T.—Employed at Skinner's "The Florist," Marblehead.

Moore, Walter E.—8 Suwanee road, East Weymouth. Real estate and insurance. Married.

Murray, Wendall R.—146 Western avenue, East Lynn. Driver for Turner Center System. Married. One daughter.

Odiorne, Ralph B.—41 Hancock street, Everett. Chief clerk shipping office, N. E. Fuel and Transportation Co. Married. One daughter.

Parkhurst, Hugh—Edgewood Poultry Farm, Gloucester. Owner operator. Married. One daughter.

Perkins, Alton G.—87 Oakwood avenue, East Lynn. Student at Eastern Nazarene College, Wollaston.

Roberts, Maxwell S.—Montgomery Park, Newbury. Head grower for Pearson, the florist.

Skinner, James N.—3 Devereux Terrace, Marblehead. Florist.

Williams, Hugh E.—Whipple Hill, Danvers. Employed by father in contracting business.

Homemaking Department

Adams, Barbara—Byfield. Housekeeper.

Alexson, Margaret A.—4 Riverview avenue, East Danvers. Student nurse at Beverly Hospital.

Bixby, Grace E.—Married. Two children. Lives in Lynn.

Bryer, Esther L. (Mrs. Harold Millard) Passaic street, Hackensack, N. J.

Burnett, Irene M.—50 Lewis street, Lynn. Keeping house for brother and working in an art embroidery store.

Cronk, Elizabeth—26 Orne street, Marblehead. Student at Mansfield School of Hairdressing.

Finch, Mary E.—Running a store in Marblehead.

Fowler, Arlene M. (Mrs. L. J. Goodwin)—24 Main street, Springvale, Maine. Keeping house.

Goodwin, Doris H.—Married. One son.

Hill, Rosa A.—Lives in Marblehead. Stenographer in lawyer's office in Boston.

Keyes, Marion E.—Lives in Danvers.

Pension, Marie (Mrs. Richard Murray)—146 Western avenue, East Lynn. Keeping house. Has one daughter.

Perkins, Marguerite M.—101 Empire street, East Lynn. Hairdresser.

Rowe, Marjorie N.—Mather School, Beaufort, South Carolina. Teaching in above school for colored girls.

Sanford, Anne (Mrs. Robert B. Ewing), 4 Gregory street, Middleton.

Small, Marion L.—79 Washington street, Peabody. In glove department at William G. Webber's in Salem.

Sutter, Edith A.—Married. Has one son. Working in candy store.

Tipert, Josephine C.—Married this fall.

Wagland, Elizabeth—Lives in Methuen.

Wiggin, Dorothy M.—Married. Lives in Salem.

Zwicker, Bernice H.—Lives in Danvers.

CHRISTMAS PARTY

On Friday, December 16, the faculty and students enjoyed an entertainment and dance held under the auspices of the Seniors. Every member of the Class of 1928 may well feel proud of the success of this afternoon social. The Senior girls presented the Birds' Christmas Carol, while the boys interpreted Dicken's Christmas Carol. Both plays were a credit to those who took part. Four members of the Rainbow Orchestra of Middleton furnished music for dancing.

SENIOR DANCE

The Class of 1928 is now busy with preparations for the Senior Dance to be held on Friday, January 13. Previous to dancing, a basketball game is scheduled between Norfolk Aggie and Essex.

JUNIOR PROM

The date of the Junior Prom is set for Friday, February 3.

EXTRACTS FROM ANNUAL REPORT OF THE HOME DEMONSTRATION AGENT

While annual reports are a bugbear to most executives, after the statistics are all gathered it is often a satisfaction to see in figures a record of the work accomplished.

As we look at our map of Essex County we find that during the past year all but nine towns have worked with the Home Demonstration Agent in carrying out the Extension program. Five of these towns have cooperated in previous years. This does not include the cities where Home Economics work for women is supervised by the local School Department. Twenty-three new communities have been developed, 715 different women have carried definite projects during the year, thirty-five town chairmen have organized a town program, while forty-two women have acted as leaders of groups in their communities. Sixty-nine groups of women have organized under the Extension Department. These groups have met for the study of clothing (adult and children's), millinery, nutrition, furniture renovation, home nursing and home improvement. There has been a total attendance of 3741.

Six hundred and seventy-five homemakers' bulletins have been distributed.

While statistics show that the membership in the Extension groups has doubled during 1927, that there has been an increase in the number of communities co-operating, a greater number of local leaders and a wider range of projects carried, we would feel better satisfied had there been more interest in home improvement and a greater demand for help in other phases of home life. We will be glad to see the projects carried more as a general community enterprise and less by small groups. This we feel will be accomplished when more work is done by local leaders.

Miss Crawford, the Home Demonstration Agent, wishes to take this opportunity to thank the town chairman and local leaders for their hearty co-operation during the year of 1927. It is through their efforts that the Extension Service has been able to help so many homemakers solve their problems in food, clothing and home management. Happy New Year to all!

GREEN AND WHITE

The 1928 "Green and White" will make its appearance soon. This publication will contain the usual departments and enumerate the various activities of the School year 1927-28. Several pages of the book will be devoted to the alumni.

ESSEX FARMER AND HOME MAKER

Published Bi-Monthly by the Essex County Agricultural School

Vol. 9

HATHORNE, MASS., FEBRUARY, 1928.

No. 2

FRUITS OLD AND NEW

Small Fruits

Farmers and gardeners of this county have always been very progressive in the growing of fruit both for commercial and home use. In the middle of the last century some very wonderful work was being done in this region in the way of originating new varieties of grapes. The development of the Concord from the wild, native grape species (*V. labrusca*) was materially helped by Rogers of Salem who did some wonderful work in bringing out new varieties.

New Grapes

In order to make grape growing a commercial success we are in need of both earlier varieties and varieties notable for their high quality. It now appears that we, at the present time, are at the dawn of a new era in valuable grapes. Three new grapes, Portland, Ontario and Brockton are all delicious ripening well in advance of Concord. The varieties in this group are all white. The quality, however, will carry them favorably before the consumer. Fredonia is an early blue-black grape and Sheridan is another valuable black variety of Concord season or slightly later. The latter is expected to replace Concord in many vineyards.

Small Fruits

There has been almost a revolution in small fruit varieties. Before the World War we had a varied list from which one might select to suit all tastes. Varieties, however, during this war period disappeared like magic and the cost of nursery stock has advanced tremendously.

Raspberries

To many, this small fruit is the most prized of all of the small fruits. It has been advancing rapidly in price on the fruit market and our consumers are much undersupplied. This is probably caused by two outstanding reasons, namely, the passing of varieties and the heavy inroads made by several baffling diseases. One of the most trying is the raspberry mosaic. The first consideration in selecting a variety should now be its resistance to mosaic. Of the new varieties which are quite well tested we should mention Latham and Newman. The former originated in Minnesota and the latter in Canada. Both are quite disease resistant and are



Melville G. Grey

quite hardy and succeed well on new soil. A new variety, Lloyd George, of English origin and developed from an English species is performing so well that many fruit growers are watching it closely. It may be necessary for us to re-establish raspberry growing through the hybrid purple cane sorts of which Columbian was a good example during the past decade. The variety Brant is a purple cane of recent origin which has been developed by the New York Agricultural Experiment Station and is well worth a trial.

Strawberries

At the present time we find ourselves in a rather unenviable position in regard to valuable commercial strawberry varieties. Most of the long standard sorts have deteriorated. The time is manifestly ripe for concentrated effort for new varieties. Several of our experiment stations are working on this problem at the present time. Fruit growing practices are changing rapidly. Growers, aided by the effort of scientific men, seem to be meeting outstanding problems of spraying, packing and producing in an admirable way. Market conditions are manifestly different from what they were a few years back. With the advent of new varie-

ESSEX AGGIE GRADUATE Wins State Gold Medal

Every friend of the Essex County Agricultural School and particularly members of the first classes were delighted to learn that Melville G. Grey, Class of 1917, was awarded a gold medal by the Massachusetts Department of Agriculture in January. Mr. Grey was judged the outstanding young farmer from a long list of candidates throughout the state. The School had proposed several other graduates who are now land owners and farmers in their own right.

Mr. Grey has made a success of his farming operations and one of his strongest features seems to be diversification. He draws his income from a number of agricultural interests and products and is a good example of the long declared conclusion of the government experts that a farmer should have his interests quite varied and should draw his income from a wide number of sources. Mr. Grey has recently extended his farm from 16 to 32 acres. He is certainly working his land very intensively. Besides other methods of marketing, he conducts a growing and well patronized roadside stand market. In fact he is President of the Essex County Branch of the Massachusetts Roadside Stand Association.

ties a wonderful development in fruit growing is apparently in the offing.

The School is conscientiously acquiring and growing these new varieties. Any citizen is welcome to visit us, examine the plants and we are only too glad to give you all information which we have been able to acquire concerning them and their behavior.

FOURTEENTH ANNUAL FARMERS' AND HOME- MAKERS' DAY

at the
Essex County Agricultural
School

WEDNESDAY, MARCH 14th

Program A. M.

President Thatcher of M. A. C.
Educational, Commercial, Farm
and Home Exhibits

Group meetings with competent speakers on Homemaking, Poultry, Fruit, Dairying, Market Gardening and Bee-keeping.

Essex Farmer and HomeMaker

HATHORNE, MASS.

Published by the Trustees of the
Essex County Agricultural School.

A BI-MONTHLY PUBLICATION SUBSCRIPTION FREE

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CALNDAR

- Feb. 15—Chebacco Pomona Grange
Winter Field Meeting at the
School.
Feb. 25-Mar. 5—Recess for the Home-
making Department.
Mar. 14—14th Annual Farmers' and
Homemakers' Day at the
School.
Mar. 30—County Home Economics
Extension Committee Meet-
ing at the School.
May 26—Junior High School Field
Day at the School.
June 13—Better Homes Day at the
School.
June 16—4-H Club Field Day at the
School.

FARMERS' AND HOMEMAKERS' DAY

Elsewhere in this number we are announcing the 14th annual Farmers' Day. On this day we hope to have a gathering of the most progressive farmers and homemakers of the County who will set aside a day for studying their problems and increasing their efficiency. This day has come to be an outstanding and recognized day throughout eastern Massachusetts. An effort has been made this year to secure the strongest and best speakers who will discuss up-to-date problems with their audiences. It is hoped that the exhibition and displays will be the best ever.

HONORS

Each year the School is receiving an increasing number of successes or honors. Since the issuing of the last number of the Farmer we have had two interesting ones to announce. In the first place a graduate of this School has been awarded the gold medal of the Massachusetts Department of Agriculture. Reference to another column will explain the award to Melville G. Grey of Wenhams, Class of 1917.

On January 5th at the Union Agricultural meeting at Worcester, a judging team of students from this School received first place and prize as a team competing with contestants from all parts of the state. The team consisted of Messrs. Peter Pasukonis of Rowley; Thomas Gould of Lynn, and Joseph Finocchio of Danvers. This, added to our success last May when a team from the School won the cup on High School Day at the Massachusetts Agricultural College, makes a rather noteworthy success. Both teams were trained by Instructor C. M. Wood.

PRIZE SPEAKING CONTESTS FOR AGRICULTURAL STUDENTS

Plans are now completed for a state-wide prize speaking contest for students in the County Agricultural Schools and Agricultural Departments of High Schools in this state. The final contests will be held in Amherst in connection with the annual High School Day of the Massachusetts Agricultural College.

Elimination contests will be held in various districts throughout the state and the winners in these contests will represent their respective schools in the state contest.

The rules of the contest call for five minute speeches on some phase of agricultural economics. Daylight saving, Co-operative Buying and Selling, of Agricultural products and supplies, Farm Relief and Control of Surplus are among the topics suggested. The purpose of the contests is to promote interest in oral presentation of farm problems and their solution. Suitable prizes will be awarded by the Massachusetts State Board of Agriculture. The committee in charge consists of Mr. Rufus W. Stimson, State Supervisor of Agricultural Education for Mass.; Mr. Leslie Brown of the Norfolk County Agricultural School and Mr. George E. Gifford of the Essex County Agricultural School.

PENDING AGRICULTURAL LEGISLATION

Senate No. 65—Petition of the State Grange for increased indemnity for reactor cattle.

Senate 174—Bill of Robert Burnett for payment of reactors.

House 643—Bill eliminating the word "Standard" on apple grading labels.

House 643—Bill authorizing the contracting for sale of certain brands or labels by the commissioner of agriculture.

House 644—Bill for inspection and issuance of signs by the commissioner of agriculture of Roadside Stands.

House 645—Bill of the Massachusetts Fruit Growers' Association providing for payment for deer damage.

A VALUABLE YEAR

Poultry Short Unit Course Completes Project

Eighteen Essex County poultry keepers have completed the prescribed course and the required practice period for home management with their flocks. As a result on Tuesday, February 21st suitable exercises will be held and certificates will be issued by authority of the Board of Trustees to these students. The class has shown wonderful interest throughout the year as a subsequent statement of their financial operations will demonstrate. Follows is a list of the members of the class and the location of their poultry projects:

Gordon Chase	Danvers
William Fegan	West Newbury
William P. Foster	Andover
John Grant	Beverly
Oleaf Hammer	Haverhill
Louise M. Holt	Salisbury
Elder L. Holt	Salisbury
John B. Hussey	Danvers
Ivan E. Kent	Rowley
Herbert A. Ling	Danvers
Katherine E. McNally	Danvers
Roscious L. S. Marsh	Beverly
Marion E. Quimby	Beverly
Stanley H. Roach	East Lynn
Howard C. Robidou	Lynnfield Cen.
Walter Rolfe	West Peabody
Sidney J. Simpson	Rowley
Charles K. Skillings	Danvers

The financial statement shows that there were 3794 hens and 26,200 chicks owned by the class. A total of 12,530 hours were spent on project work.

Value of hens, 3,794 @ \$2.00..	\$7,588.00
Value of chicks, 26,200 @ .25	6,550.00
Total receipts	\$33,851.15
Total expenses	26,566.75

Total profit	\$7,284.40
Labor paid selves..	4,878.50

Gain plus labor value	\$12,162.90
--------------------------------	-------------

The last line, in other words, means the gain in cash and equipment for the year's work.

NOTE

In the February issue of the American Produce Grower, Instructor C. M. Stearns of our staff has an article on the new celery culture. The article is illustrated and one of the pictures shows the new block system as tried out at the School Market Garden under Mr. Stearns' direction. The substance of the article appeared in the January 1927 issue of the Essex Farmer and Homemaker.

House 731—Bill to pay K. Berthold, Saugus, for cattle slaughtered as result of tuberculin test.

House 319—Bill to restrict signs, stands, etc., along state highways.



COUNTY AGRICULTURAL AGENT



THE NEW ENGLAND SEVEN PROGRAM

Believing that seven apple varieties will serve our needs better than seventy, the Agricultural Colleges of New England, through the Extension Service, are co-operating on a Better Variety program. Seven apples have been selected as especially well adapted to New England conditions.

McIntosh
Baldwin
Gravenstein
Wealthy
Delicious
Northern Spy
Rhode Island Greening

The above varieties are the leaders in the New England states. Upon them our reputation as a fruit section depends. And although it is doubtful if many growers will want all of the seven varieties, three or four can be selected to suit any section. Others should be grown only in a limited way for special or local markets.

The Better Variety Program is one of the first steps in the matter of co-operation among the fruit growers of New England. Next year another important item in fruit production will be stressed. During 1928, however, emphasis is being placed on the elimination of odd varieties, (1) by planting only recommended varieties, (2) by top grafting the younger, more vigorous trees, and (3) by cutting down those trees not adapted to top grafting. In general most trees under twenty years of age may be top grafted, but it is far better to do the work before the tree is ten years of age.

One feature of the work this year is a Top Grafting contest. Any grower with more than ten trees of odd varieties is eligible. The prizes are worth working for.

MASSACHUSETTS TOP GRAFTING CONTEST

1928

CLASS I

For growers having more than 100 trees outside the "New England Seven" list.

Prizes: 1st, 50 Certified Apple Trees; 2nd, 200 pounds Nitrate of Soda; 3rd, swivel-blade pruning saw.

Sweepstakes for New England, 100 Certified Apples Trees.

CLASS II.

For growers having 10-100 trees outside the "New England Seven" list:

Prizes: 1st, 25 Certified Apple



Brooder House Extension Latest Addition to School Poultry Plant.

Trees; 2nd, Grafting Pot; 3rd, 25 pounds Arsenate of Lead.

Prizes to be awarded in each class for highest total of points based on the following:

1. For each tree under 10 years of age successfully grafted, 2 points.
2. For each five stubs on older trees successfully grafted, 1 point.
3. For each tree of odd variety cut down (excluding fillers), 3 points.
4. For bringing orchard to 100% conformity with New England Seven list, 0 to 20 points. (Proportionate number of points as follows: 99% conformity 18 points, 98% conformity 16 points, etc. down to 90%.)
5. For general excellence of top grafting operations, waxing, branch selection, etc. (based on mid-summer inspection), 0 to 10 points.

Prizes for 1928 effort to be awarded not later than October 1, 1928.

For further information consult your county agent.

COUNTY AGENT'S REPORT

January 1928

Days in Field	11
Days in Office	13
Office Calls	12
Phone Calls	18
Letters Written	92
Form Letters distributed	1437
Farm Visits	30
Total Meetings	11
Attendance	262
Press Articles written	2

NOTE

Reserve Wednesday, March 14 to attend the 14th annual Farmers' and Homemakers' Day at Hathorne. An unusually good program.

NEW BROODER HOUSE READY FOR INSPECTION

The picture of this brooder house represents the latest addition to the School Poultry Plant.

This building is 52 feet long, 20 feet deep and was constructed to house a hot water brooding system. The building itself was built during the Christmas recess by five students from Instructor Moore's Advanced Poultry Division, under the supervision of Instructors Moore and Hardy of the Mechanics Division.

The cement foundation work was put in by pupils in the Mechanics Division under the supervision of Instructor Hammond.

The brooding system purchased from the Shenandoah Manufacturing Company has been installed and it is planned to have the entire equipment in operation on Farmers' Day, showing the latest method of brooding small chicks. The system installed at the School consists of four 10 foot units, each unit with a capacity of 500 chicks.

The particular advantages to a system of brooding of this sort are first, economy of labor; second, economy of operation. The results of the two being the possibility of raising chicks up to the age of from six to eight weeks at a cost far below that possible under the present and more common methods of brooder stoves in brooder houses.

The Poultry Department has the figures showing the cost of the building and the equipment and are planning to keep figures showing the cost of raising chicks by this newer method.

W. B. MOORE.

HOME DEMONSTRATION AGENT

KITCHEN IMPROVEMENT

Part of Better Homes in America Movement

Since the most laborious tasks of the homemaker center in and around the kitchen and the greater portion of the day is spent doing these tasks the improvement of the kitchen may well be given serious thought by the homemaker. Why walk 800 feet in making a cake when it could be made by walking only 80 feet? Why have dark gloomy kitchens when they might be made cheerful by new windows, light colored paint or better artificial lighting? Walls and floors could be treated to save laborious cleaning or scrubbing.

If finances are limited, the kitchen can often be replanned to provide the maximum of comfort, attractiveness and convenience at the minimum expense. Rearrangement and small, inexpensive changes often make a gloomy inconvenient kitchen into a bright and efficient one. Useless equipment and accumulated rubbish may be discarded.

It is not always easy to look upon a room with new eyes and it sometimes remains for an outsider to discover the possibilities.

Mrs. Haynes, State Home Management Specialist, is coming into Essex County in March to begin a series of meetings that will help the homemaker with just these problems. The first meeting will be held at the home of Mrs. Horace Brown in West Newbury Friday, March 23. Project leaders are coming from surrounding towns and they will return to their groups with all the latest suggestions for better kitchens.

During Better Homes week in April we plan to conduct tours, visiting the improved kitchens.

Other groups will be formed in different parts of the county. If you would like to become a member of such a group notify your town chairman or write Miss Crawford, the Home Demonstration Agent.

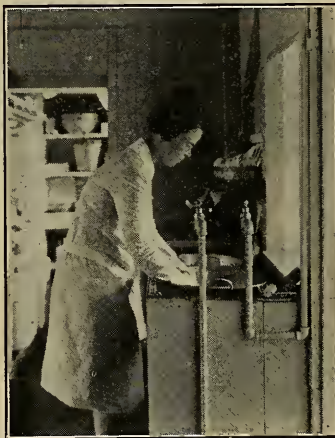
BETTER HOMES IN AMERICA

Several community chairmen in Essex County have accepted their appointments by Mr. Herbert Hoover, President of the Better Homes in America movement. They are already planning interesting community enterprises to culminate during Better Homes Week, the last week in April. This usually works through lectures, contests, demonstrations, etc., to promote the spirit of improvement in dwellings and home grounds.

Your town should have a part of

this movement, which makes for better homes, happier families, and a more prosperous community. The following communities have active chairmen: Ballardvale, Beverly, Cliftondale, Danvers, Essex, Groveland, Peabody, Rowley, South Cleveland, West Oxford and West Newbury.

WHICH KITCHEN IS YOURS?



THIS

These pictures illustrate how a backache is often caused and also the remedy. The pictures were loaned by Miss Pozzi, Agent of Hampshire County.



OR THIS?

COUNTY HOME ECONOMICS EXTENSION COMMITTEE

New Organization to Forward Extension Program

The work of the Extension Department has become so far-reaching that we believe that the time is now ripe for organizing a "County Home Economics Extension Committee." This Extension Committee is to consist of women from various sections of the county.

The duties of this Committee will be:

1. To promote Extension work in Essex County.
2. To co-operate with the Home Demonstration Agent and the Town Chairmen in planning a year's program of work based on the needs and requests of the homemakers in the county.
3. To suggest methods for carrying out such a program.
4. To study results in order to change policies and so make the Extension program more effective.

In organizing this committee we feel that we are putting our Extension Department on a more business-like basis.

We wish to publicly thank these homemakers for accepting this appointment. We realize that they are busy women and appreciate their loyalty and co-operation. We hope to make our Extension program more helpful to all communities as a result of a better organized effort.

The following women have accepted their appointment:

Mrs. Bernard, Manning, Amesbury; Miss Marion Parker, Beverly; Mrs. Robert Little, Boxford; Mrs. H. K. Hayden, Cliftondale; Mrs. C. S. Wright, Danvers; Mrs. Robert Mitchell, Groveland; Mrs. Fred P. Kilham, Hamilton; Mrs. H. K. Richardson, Middleton; Mrs. Irving Johnson, Rowley; Mrs. Horace Brown, West Newbury.

There was once an old sailor my grandfather knew
Who had so many things which he wanted to do
That whenever he thought it was time to begin
He couldn't because of the state he was in.

—A. A. Milne in "Now We Are Six"

NOTICE

Farmers' and Homemakers' Day at Hathorne

Wednesday, March 14

Part of the program arranged especially for the women interested in homemaking.

4-H CLUB



DEPARTMENT

CHANT OF THE CRIER

At the Currier School, Newburyport, the Poultry, Forestry and Room Beautiful Clubs have their meetings during school hours, every Tuesday from 3.00 to 3.30.

"The Club Crier" is the name of our County 4-H Club paper.

Therefore the heading of this column.

Hayden Hsley of Newbury exhibited a pen of White Rocks in the Boston Poultry Show and won second prize.

If you want to make money farming, forget the farming methods employed by your grandfather.

Last year Albert Weatherby had the highest egg yield per bird, in the state. His average was 159.7 eggs per bird. Can you beat that this year?

A Club supper or entertainment is a good way to advertise 4-H Club work, and—

It Pays to Advertise

Robert B. Parmenter, State Extension Forester, gave a talk on Forestry at Newbury, January 17. He showed two reels of movies to illustrate his talk.

I will have plans for making bird houses ready for distribution about February 15. The plans will be for Robin, Bluebird and Wren houses.

Dollars and Sense of 4-H Club Work

I know that 4-H Club Work is playing an important part in the development of the young rural people in Essex County.

What I am trying to do is to get you to know this.

If the same proportion holds true in Essex County as in the whole United States, one in eighteen of the young rural people belong to a 4-H Club.

The best way I can impress upon your mind the value of 4-H Club Work is to show you in dollars and cents just how much we have accomplished in Essex County the past year.

Read the statement and then say to yourself: WHAT am I doing to help 4-H Club Work!

Lunch Box Club — 1459
lunches put up\$ 510.65

Dairy Club—Stock owned and cared for	1000.00
Clothing Club—New garments made	1741.26
Garden Club—Crops grown ..	2542.00
Canning Club—13,697 qts. Canned goods	6848.00
Canning Club—1596 jars of Jellies	399.00
Poultry Club—Eggs sold	9155.00
Poultry Club — Day old chicks	577.00
	\$22,773.41

WHAT 4-H CLUB WORK IS

Boys and girls 4-H Club Work is a part of the national agricultural extension system. Through it, rural boys and girls 10 to 20 years of age, in school and out of school, are taught better agricultural and home economics practices and the finer and more significant things of rural life. It builds men and women.

WHAT 4-H CLUB WORK DOES

4-H Club boys and girls are demonstrators—they learn and teach better ways on the farm, in the home, and in the community.

4-H Club boys and girls work, earn money, and acquire property.

4-H Club boys and girls do the needful, the wholesome, the helpful thing. They become leaders.

4-H Club boys and girls play the game fairly.

4-H Club boys and girls meet together, work together, play together, co-operate, achieve.

4-H Club boys and girls build up their bodies and their health through right living; they train their hands to be useful, their minds to think clearly; their hearts are kind.

4-H Club boys and girls have high ideals and standards. They serve.
4-H Club boys and girls are doers.

THE CLUB PROBLEM

There are about 21,000 rural boys and girls 10 to 18 years of age in Essex County. There are now enrolled in 4-H Club work about 1200 rural boys and girls, or about one in 18. The aim is so to develop the work that every boy or girl who reaches maturity and takes up farm life shall have had the opportunity in youth to take part in 4-H Club work.

HOW TO FIND OUT MORE ABOUT 4-H CLUB WORK

- (1) Ask a Club member or local Club leader.
- (2) Ask your county extension agent.
- (3) Write to Robert B. Ewing, 4-H Club agent, Hathorne, Mass.

PRIZE WINNERS (1927)

The following students of the Agricultural Department won the Bauer gold prizes awarded for excellent agricultural accomplishment.

First, Harold Rogers of Ward Hill; second, Peter Pasukonis of Rowley; third, Horace Shute of West Newbury; fourth, Thomas Gould of Lynn; fifth, William Wilson of Methuen.

The William C. Endicott prizes awarded for outstanding work in horticulture were awarded to:

Arthur Gordon of Rowley, first; Roger Peabody of Boxford, second; Courtland Laughton of Haverhill, third; Charles Elwell of West Newbury, fourth; Annie Dickinson of Methuen, fifth.

The Alumni Academic prize was won by Clarence Tibbets of Newburyport.

JANUARY EGG LAYING CONTESTS

SMALL FLOCKS

	Birds	Eggs	Eggs per bird
Sherburne Pendleton, Ballardvale	10	269	26.9
Edward New omb, Ballardvale	8	186	23.2
Henry Nason, West Boxford	7	135	19.2

LARGE FLOCKS

Paul Fitzgerald, Haverhill	32	694	21.6
Patsy Filomeno, Haverhill	86	1807	21.0
Raymond Ouellette, Andover	95	1729	18.2

CLUB REPORTS

Ballardvale	224	3321	15.1
West Andover	232	2571	11.0
Methuen	112	969	8.9

FARMERS' AND HOMEMAKERS' DAY

The Homemaking Department welcomes the change of name by which the day dedicated to the adult citizens of Essex County, by the School, is to be known in the future. "Farmers' and Homemakers' Day." Homemakers have done much in the past to make the day a success, and have learned much from the program in years gone by. Now under its new name, the homemaker has become recognized as a part of the day's activities and the members of the faculty of the Girls' Department are looking forward to meeting more of the women of the county than ever before. Women of all ages are interested in the big problem of Homemaking and when the County women get together on Farmers' and Homemakers' day, success is sure to follow.

The Homemaking Department is planning an interesting exhibit on Farmers' and Homemakers' Day. The building will be open to both men and women and the work of the students will be shown in the different class rooms. Sewing, Cooking, Homecraft, Art, Science, and Textiles will be on exhibition, showing the work being done by the students in their every day classes.

The prizes given by Mrs. Ralph S. Bauer for excellence in summer projects were awarded to:

- 1st, Doris Montrose, Lynn, Class '27.
- 2nd, Gladys Stanley, Salem, Class '28.
- 3rd, Annabella McLelland, Beverly, Class '28.
- 4th, Florence Howard, Lynn, Class '29.

There were many other excellent projects, so good that the judges found it hard to decide the winners. The summer project has become a very important and useful part of the Homemaking Department program.

The graduation prizes offered by Miss Gertrude McCormick for excellence in interior decoration were awarded to Miss Lois Vance '28 of Newburyport, first prize, and Miss Alice DeCraney '28 of Lynn, second prize.

The alumni prize for the greatest improvement in English was awarded to Miss Iona Hurd of Georgetown, class of '27.

A style show was given at Danvers Grange on January 10 by girls of the Homemaking Department. Representing the women's section of a magazine, they demonstrated the style, material and workmanship of some of the dresses which they have made for themselves during the School year. Miss Miriam Howard acted as leader and told the audience something of the aims of the School. Those who took part were Mildred Russell, Ruth Carlson, Katherine Cashman, Alice Reed, Geneva Ruxton,

Enaise St. John, Dorothy Pingree, Sylvia Sharples and Helen Lendall, all of Danvers.

The Homemaking Department has been pleased to welcome as its visitors several of the past graduates of the School.

- Miss Doris Griffin, '27, Rockport.
Mrs. Dorothy MacWilliams Averill, '27, now of Amesbury.
Miss Sarah Burnham, '25, Essex.
Miss Blanche Burnham, '19, Essex.
Miss Lillian Pizzello, '26, Beverly.
Miss Doris Montrose, '27, Lynn.
Miss Hazel Henderson, '26, Lawrence.

Much interest is being shown in basketball by the girls of the School. Besides the varsity and sub team, there are three freshmen teams and one junior team. Much interest is being shown in basketball by the girls of the School. Beside the varsity and sub team, there are three freshmen teams and one junior team. Much interest is shown by all of the teams and very good work is being done. The girls are being coached by Miss Ida May Perkins of Haverhill, a student in the Agricultural Department. Two outside games have been played in one of which the School team was defeated and in the other the School team won.

Many of the students took advantage of the opportunity to learn tennis during the early fall months and several good players have been developed.

REFRIGERATOR COOKIES

Meet our good friends, Refrigerator Cookies. They merit your interest and attention.

Time was when thin wafer-like cookies necessitated long hours of tedious, work and unending patience, but times have changed.

Today finds the efficient housekeeper making a "roll of cookies" which will last several days if kept cool. Each day finds the cookie jar refilled with fresh crisp cookies sliced from the roll and no more do we find it necessary to discard the last of a batch because they have become soft and cummy.

Here is the solution:

Ice Box Cookies

- | | |
|--------------------------------|------------------|
| ½ c. white sugar | ½ c. brown sugar |
| 1 c. butter | 1 egg unbeaten |
| 2½ c. flour | ½ t. soda |
| ½ t. cinnamon | pinch salt |
| ½ c. chopped blanched almonds. | |

Mix, knead and put into a roll about as large around as a water glass. Let stand in refrigerator overnight. Slice paper thin and bake in oven 375° F.

HONOR ROLL FOR SECOND QUARTER 1928

Sylvia Sharples, West Newbury, 92.5; Miriam Howard, Danvers, 90.0; Viola Messer, Methuen, 90.0; Florence Lawson, Essex, 88.9; Enaise St. John, Danvers, 88.6; Ruth Graves, Peabody, 88.4; Margaret Gordon, Methuen, 88.0; Marjorie Tweedy, Saugus, 87.9; Ida Miller, Lawrence, 87.8; Grace Torsen, Lynn, 87.5; Helen Flynn, Salem, 87.4; Elva Ross, Amesbury, 87.3; Miriam Dawson, Lawrence, 87.0; Florence Howard, Lynn, 87.0; Julia Bruce, Lynn, 87.0.

ATTENDANCE RECORD

January 27th ended the first half of the School year and the following students of the Homemaking Department have been present every day. This is most interesting because the girls live at such long distances from the school.

Seniors—Evelyn Philbrick, Middleton; Mildred Russell, Danvers.

High School Specials — Ruth Graves, Peabody; Eleanor Keogh, Amesbury.

Juniors — Lois Brander, Saugus; Eunice Friewald, Andover; Viola Messer, Methuen; Grace Torsen, Lynn.

Freshmen—Julia Bruce, Lynn; Isabel Bubier, Rowley; Margaret Gordon, Methuen; Veronica Marquis, Lawrence; Isabel Murray, Saugus; Aura Pentilla, Peabody; Mabelle Stoss, Salem; Evelyn Stott, Andover; Marjorie Tweedy, Saugus; Ruth Nichols, Lynn.

The senior girls gave an act from the Bird's Christmas Carol on December 16, as their contribution to the Christmas festivities. The parts were well taken and the class was asked to repeat the play for the benefit of the Chebacco Pomona Grange which met at the School on February 15.

Mrs. Ruggles' seven children were invited to Carol Bird's Christmas dinner, and Mrs. Ruggles spends the entire day in preparing and training them for the momentous occasion.

The leading part, that of Mrs. Ruggles, was taken by Florence Lawson of Essex, and her interpretation of the anxious, overworked but ambitious mother was especially well rendered. The children's parts were represented by Evelyn Philbrook, Middleton as Sarah Maud; Mildred Russell, Danvers, as Peter; Gladys Stanley, Beverly, as Peoria; Helen Lendall, Danvers, as Kitty; Evelyn Gardener, Beverly, as Cornelius; Annabelle McLelland, Beverly, as Clem; Thelma Coleman, Lynn, as Larry.

Weather Summary for 1927

The year 1927 started off to be one of the driest on record and by the end of July the accumulated deficiency amounted to nine inches. During the latter part of the year, however, there was an excess (August, October, November, December) which cut this deficiency down to five inches.

Although in some respects the sum-

mer was a cool one, yet the year as a whole was exceedingly warm and piled up nearly a record amount of excess degrees of heat. The year as a whole was not as sunny as 1926. A few of the statistics for the year are given below together with the corresponding facts for 1926, for comparison.

	1927	1926
Hottest Day of Year	July 13, 14 93°	July 2 101°
Coldest Day of Year	Jan. 27 4*	Feb. 9 4*
Average Daily Temperature	49.2	45.7
Total Precipitation	38.07"	33.09"
Ave. Relative Humidity at 8 a. m.	73.9%	75.6%
Rain or Snow on	162 days	119 days
Clear Days	97	112
Partly Cloudy Days	205	196
Days with no sun	63	57
Total hours Sunshine (approximately)	2453	2637
Per cent Sunshine	54.9%	59.0%

*Below zero

WEATHER NOTES FOR DECEMBER 1927—JANUARY 1928

	December	January
Maximum Temperature	63 (8th)	53 (7th)
Minimum Temperature	10 (24th 27th)	1 (30th)
Average Daily Temperature	32.4	28.5
Greatest change in one day	31° (27th)	38° (1st)
Least change in one day	8 (17th)	4 (21st)
Inches of snowfall	4"	5"
Precipitation	4.56"	2.46"
Normal precipitation	3.41"	3.82"
Average relative humidity 8 a. m.	79.1%	67.3%
Number clear days	9	8
Number partly cloudy days	14	17
Days with no sun	8	6
Days on which rain fell	12	11
Total hours sunshine	161	158.5
Per cent sunshine	56.7%	52.2%

Both December and January were somewhat warmer than normal, January especially so. While December had an excessive amount of rain, January started the new year off with a deficiency of 1.36". The humidity in

January was relatively low. In December there were five storms, each of which produced more than one-half inch of water. These occurred on the 2nd, 5th, 8th, 13th and 16th. In January there were but two storms, on the 20th and 25th.

been harvested anywhere from one to several days before.

The Massachusetts Roadside Stand Association admits only such farmers who grow at least 60% of their own products and the other 40% must be purchased in the neighborhood unless the Board of Directors of the Association grant permission to special cases where climatic conditions prevent early productions and in these cases not over 10% can be purchased outside the neighborhood. Many of the stand men sell nothing but what they raise.

At a recent meeting of the State Association held at Waltham, Mass., the following officers were elected for 1928: H. G. Turner, Andover, President; C. M. Stearns, Danvers, Vice-President; M. G. Grey, Wenham, Secretary and Treasurer.

Board of Directors, above three and H. N. Caldwell, Littleton; R. N. C. Barnes, Andover.

Two other states, New Jersey and Rhode Island have formed similar associations and have adopted the same ear of corn sign as Massachusetts has for her emblem.

PLAN NOW FOR FARMERS' AND HOMEMAKERS' DAY, WEDNESDAY, MARCH 14.

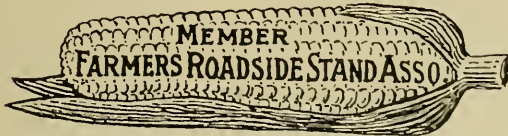
The annual Farmers' and Homemakers' Day will be held at the Essex County Agricultural School on Wednesday, March 14. An all day session is planned with the program beginning with an address by Pres. Thatcher of the Massachusetts Agricultural College. The usual educational and trade exhibits will be on display throughout the day and plenty of opportunity will be given to make a study of them. In the afternoon there will be group meetings in homemaking, poultry, fruit, dairying, vegetable gardening and bee-keeping. Meetings of the Roadside Stand Association and the Essex County Cow Test Association are also scheduled on that day. Wide-awake farmers and homemakers in Essex County will plan to spend the entire day at Hathorne on March 14.

IN MEMORIAM

In the passing of Mr. William F. Howe, assistant State Club Leader, 4-H Club work in Massachusetts suffers a great loss. Mr. Howe will be remembered for his happy disposition and sterling character. The young people of this state have lost a staunch and true friend.

Among the 4-H Club boys of our School he was held in popular esteem for his readiness in helping to promote 4-H Club work.

What is the Roadside Stand Association of Massachusetts



A few years ago a group of farmers organized what is known as the Massachusetts Roadside Stand Association. A set of by-laws were drawn up and a sign as shown above was copyrighted to protect themselves. To safeguard the public certain rules were made which guarantees to the purchaser at these stands, quality produce at moderate prices.

This group of farmers saw the

opening whereby they could sell their produce by such a stand market instead of disposing of it through a wholesale market or a house to house trade. This opened up the opportunity for the housewife to drive out to the country and purchase fresh produce, such as corn, peas, strawberries, etc., which had only been harvested a short time, where before she was obliged to accept the storekeepers products which may have

ESSEX AGGIE STUDENTS WIN IN FRUIT JUDGING CONTEST AT WORCESTER

In the fruit judging contest held in connection with the Union Agricultural meetings in Worcester, January 6, a judging team composed of three students of the Essex County Agricultural School was awarded first place. The team consisted of Peter Pasukonis of Rowley; Joseph Finocchio of Danvers and Thomas Gould of Lynn. These boys placed first, fourth and fifth, respectively in a list of 35 entries representing six different schools. Second and third places were won by Russell McClintock and Arthus Hansen, both from the Norfolk County Agricultural School.

Fruit judging at the Essex County Agricultural School has become thoroughly established. The most recent achievement was the winning of three prizes awarded by the State Board of Agriculture at the mid-winter fruit judging contest in Worcester held in connection with the Union Agricultural meeting.

Peter Pasukonis of Rowley, who won first prize, has been a consistent high point winner and has represented the School in four fruit judging contests. Joseph Finocchio of Danvers, who won fourth prize, has developed rapidly as a fruit judge. Not until this year has he participated in School contests. Thomas Gould of Lynn, who won fifth prize, has had the honor of representing the School in five contests, more than any other student. The team score at the Worcester contest lead all others. Thirty-five students participated in the contest; all parts of the state were represented.

The many prizes which the students have won during the two years have stimulated a keen interest in the contests. At the High School Day contest held by the Massachusetts Agricultural College in Amherst last year these students won first prize, a large silver cup. Since it is necessary to win the cup three times before it becomes permanent property of the winners, the students are looking forward with keen interest to the next contest which will be held May 5 when they hope to win it for a second time.

Fruit judging has aided our students to identify varieties, to understand blemishes on fruits, and consequently to be better able to eliminate the poorer grades. It has also helped in showing how to exhibit and take prizes at fairs. With the introduction of the many promising new varieties of fruits it is thought that fruit judging will be of even more value than at present.

In anticipation of the fruit judging contests many students of this School have been trained in special classes under the direction of Instructor C.



Essex Aggie Prize Winners in Fruit Judging

M. Wood of the Agricultural staff. The results of the last contest as enumerated above indicate the thorough manner in which the students have been trained.

WHAT IS THE NEW ENGLAND GRADE LAW?

Out-of-state competition has caused a reaction on the prices that the farmers of Massachusetts have been receiving for their produce. After investigation and studies of the situation by Agricultural Agencies and producers, the New England Farm Marketing Conference, held in Boston Dec. 9 and 10, recommended a bill whereby New England products of quality could be identified. At present there are grades written up for eight products: Bunched beets, bunched carrots, bunched turnips, globe radishes, asparagus, bunched celery, strawberries and eggs. Grades for other products will be drawn up when necessary.

The grading law does not compel farmers to label their produce, but it affords opportunity to those farmers who have high quality produce to label their products according to the law and thereby obtain better prices than they have been receiving.

A label has been provided for in the new grading law which gives the Commissioner of Agriculture authority to establish official grades and standards for farm produce, except apples and milk, produced within the Commonwealth.

Those who desire to use the grades may do so upon application to the Commissioner requesting permission to use the label. The label will be supervised by the Commissioner of Agriculture who has the authority to revoke or suspend the right to use

the label whenever it appears on investigation that the labels have been misused. A punishment by fine is also provided for violations. The labels will be purchased through the Commissioner at a small cost.

Mr. Kreck of the Division of Markets for Massachusetts will speak on the New England Grade Law on Farmers' Day. Don't fail to hear him if you are interested in the bill.

FARM FACT FILLERS

Now is the time to prune those fruit trees which you planned to prune last year.

Clean up your cornfields before May first if they are infected with the corn borer.

Early hatched chicks mean more eggs next winter when egg prices are high.

Testing seed corn is another job which should receive attention during the winter months. Tested seed means more bushels per acre.

Many potato diseases are carried by the seed. Hence, be sure that your seed is treated before being planted.

Top grafting fruit trees is one way of eliminating the undesirable varieties in your orchard and thereby increasing your profits. Write, Mailing Room, M. A. C., Amherst, Mass., for a copy of Leaflet No. 117.

A NEW BOOK

"These Changing Times," by E. R. Eastman, published by MacMillan Co. is a story of farm progress during the last twenty-five years.

Mr. Eastman is well qualified to give us this review. He was reared on a farm, has been a teacher and directing officer of county agents and is now editor of the American Agriculturist.

ESSEX FARMER AND HOMEMAKER

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Vol. 9

HATHORNE, MASS., MARCH, 1928

No. 3

COLOR IN THE HOME

With the bright sunshine of March comes the feeling that spring is somewhere on the way; and with spring comes the annual and ever fresh delight in the newness of nature. How eagerly we watch for the swelling of the buds and the song of the first returning birds! And just as everything in nature is taking on its new spring suit, so we humans want a new spring suit, too! The new materials being shown this spring in clothing and in house furnishing almost rival nature in their beauty. Color is running riot, so that every woman is allowed to gratify that desire for color, inherited it is said, from her savage forebears; with this difference, however, that the combination be artistic and the colors becoming to the wearer. Civilization has given us the knowledge, so that we may appreciate and combine colors to harmonize with their surroundings.

The new prints, both in silk and cotton, are beautiful and reasonable in price. Any woman can wear them if she studies her figure and coloring. The large woman must avoid the too bright and too large figures and the predominating color must not detract, but enhance, the color of her hair and eyes.

The small, slight woman can wear almost any design, but here again, she must wear the basic color that brightens and brings out the natural coloring.

Simple straight lines for the print dresses are best, since the beauty is in the material and there is no need for extras.

If there are to be new draperies or a new couch-cover in the home, don't be afraid to make them colorful; only be careful to have them harmonize with the other furnishings in the room. The new cretonnes are beautiful and fairly reasonable in price, and when used either harmonizing or contrasting with the other furniture, will be a source of joy to the homemaker, the rest of the fam-

(Continued on page 4)

NEW ENGLAND GRADE LAW

The New England Label, adopted by the New England States for the purpose of identifying New England Products of quality, is shown on this page.

The new grading law gives the Commissioner of Agriculture authority to establish official grades and standards for farm products, except apples and milk, produced within the Commonwealth. At the present time there are grades on bunched beets, bunched carrots, bunched turnips, globe radishes, asparagus, bunched celery, strawberries, and eggs. Grades for other products will be drawn up when found necessary.



Farmers are not compelled to grade and label their produce, but it will pay the producer of high quality produce to grade and label their products and thereby receive better prices. Those desiring to use the grades and labels may do so upon application to the Commissioner, requesting permission to use the label. The label will be supervised by the Commissioner of Agriculture, who has the authority to revoke or suspend the right to use the label whenever it appears, on investigation, that the labels have been misused. A punishment by fine is also provided for violations. The labels may be purchased through the Commissioner at a small cost.

FERTILIZERS FOR ASPARAGUS BEDS

The Market Garden Field Station of the Massachusetts Agricultural College at Waltham recommends one of the following practices for bearing asparagus fields. *First*—

(a) Before the cutting season apply 400 pounds of super-phosphate (acid phosphate) and disc-harrow in, but use care not to cut too deep to injure the crowns.

(b) Third week in June apply 300 pounds of nitrate of soda and 200 pounds of muriate of potash.

(c) First week in August apply 200 pounds of nitrate of soda and 200 pounds of muriate of potash.

(d) First week in September apply 300 pounds of nitrate of soda.

Second—5-8-7 mixed fertilizers.

(a) Apply 1000 pounds just before cutting season.

(b) Apply 1000 pounds third week in June.

(c) Apply 200 pounds of nitrate of soda and 150 pounds of muriate of potash the first week in August.

(d) Apply 200 pounds of nitrate of soda the first week in September.

The following plant food requirements are recommended by the Field Station for first-year beds:

(a) Apply 1000 pounds of a 5-8-7 fertilizer scattered along the rows the last week in June or the first week in July.

(b) Apply 200 pounds of nitrate of soda the middle of August.

The second year the roots are set the application should be about two-thirds of that given the cutting beds. The time of application is the same except that the first application should be made the first or second week in May. The fertilizer should be scattered fairly close to the plants, because the roots do not meet between the rows.

If it is desired to use manure as a part of your plant food, you can replace a ton of a 5-8-7 fertilizer with 2½ cords of manure. Five cords of manure should be used per acre for a good application. Where chicken manure is available, three or four

(Continued on page 4)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School.

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Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

March 30—County Home Economics Extension Committee Meeting at the School.

April 30—May 7—Recess for the Homemaking Department.

May 26—Junior High School Field Day at the School.

June 13—Better Homes Day at the School.

June—Parents' Day in the Homemaking Department.

FARMERS' AND HOMEMAKERS' DAY

Over 1,000 attended the annual Farmers' and Homemakers' Day held at Hathorne on March 14. By actual count 285 automobiles were parked on the school grounds. The educational and trade exhibits were fully up to the standard set in previous years, and ample opportunity was given to view and study them. The main speaker in the morning was President Thatcher of Massachusetts Agricultural College, his topic being "The Future of Agriculture in New England." This was followed by Neil B. Herrick, Manager Farm Division, Edison Electric Illuminating Company of Boston, his topic being, "Electrifying the Farm."

The sectional meetings, held in the afternoon, were well attended, and prominent speakers, including Commissioner A. W. Gilbert, addressed the groups on Fruit, Vegetable Gardening, Dairy, Poultry, and Beekeeping. An account of the Homemakers' program is given in another column.

PRICE INCREASED ON LEGUME CULTURES

In order to make financial rates equal the cost of production and to improve the quality of legume inoculant service annually supplied by the Experiment Station, it has been felt necessary to increase the price of cultures from 25 cents to 50 cents. If interested, communicate with your County Agent.

TO REDUCE CORN-BORER DAMAGE

Destroy all corn-stalk refuse on farm before May 1.

Disk well before plowing corn field. Complete clean-up reduces damage and checks spread.

Grow more clover, alfalfa, soy beans, sweet clover.

Use good seed of adapted varieties. Then you will have fewer borers, fewer moths, fewer eggs.

This is good farming, and good farming pays.

ATHLETIC EVENTS AT THE SCHOOL

During the week of March 1st to March 8th the hygiene classes were tested in several events. The fifteen-yard dash proved to be very popular with many of the speedy boys in the School. At the final gun John Tattersall, George Day and Harold Lundberg were close competitors, being credited with 2 and 1-5 seconds for the distance. A contest in standing broad jumping brought forth Stanley Emerson as the champion with a leap of 8 feet 8½ inches. George Strobel and Roland Daggett were the runners-up. The most popular contest of all was the one in pull-ups, familiarly called "chinning." Two boys were tied at 18, which is an exceptionally good number. Several years ago the physical director was a contestant in his college strength tests, and out of over 50 picked contestants not over three touched this figure. Again, when it is remembered that two others accomplished this feat 17 times, it can be seen that the boys in this School are physically in very good shape. The leaders in this contest were Robert Mooers, George Fuller, Harold Lundberg and Wallace Corner.

Several other contests are being run off, such as a potato race, shot put, and high jump. As a result it is hoped to show the marked increase in strength of the boys from year to year in the betterment of their class average.

FARMERS' AND HOMEMAKERS' DAY IN THE HOMEMAKING BUILDING

The day that has been called Farmers' Day for so long, has an addition to its title; women have been officially recognized as an important part of the day's activities and the homemaking department of the School appreciates the honor and tried to do its part to make the last Farmers' and Homemakers' Day the best ever.

The classrooms showed many samples of the work done by the School. The cooking and dietetic classes, assisted by the Art Division, demonstrated a St. Patrick's birthday table, with the cake made by the students. Food charts made by the dietetic classes showed proper food and food values.

The three sewing rooms were most attractive with their exhibitions of all kinds of clothing made in the classroom and as home projects.

The art room attracted much comment with its exhibition of fabric painting, machine shirring and machine embroidery, also the making of nut cups and place cards. Many women availed themselves of this opportunity.

The lectures in the afternoon were largely attended by the women. Mrs. Harriet J. Haines, State Home Management Specialist of the Extension Department of Massachusetts Agricultural College, gave a lecture on "The Efficient Kitchen." She illustrated her talk by slides, giving help and advice on the proper kitchen arrangement for comfort and utility.

The second lecture was on Child Training by Mrs. Annette T. Herr, State Leader of Home Demonstration Agents. Mrs. Herr gave a very helpful talk to those who have the problem of training the child who is to be the future citizen, and who will help to make this country a success or a failure. The responsibility of parents was stressed and many valuable suggestions were given.

The day was one of education and enjoyment, both to the hostesses in the Homemaking Department and to the women who were so much interested in the work done in the school.

THE AGRICULTURAL OUTLOOK

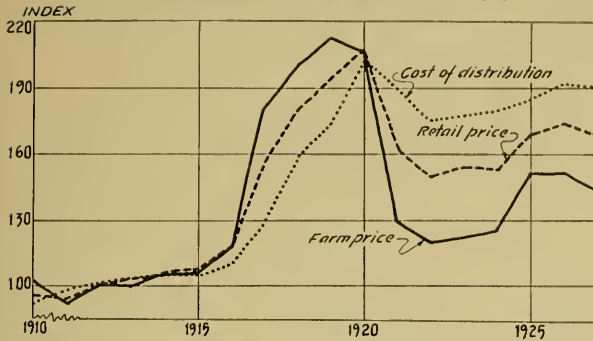


Figure 3.—Index Numbers of the United States Farm Price of Foods, Cost of Distribution and the United States Retail Price.

From 1916 to 1920, costs of distribution were low and farm prices were relatively high. Since 1920, costs of distribution have been high and farm prices have been low.

One of the real reasons for very careful study on the part of farmers, is the mal-adjustment in the price rates according to Dr. G. F. Warren of Cornell. Take the commodities below, and note the proportion received by the farmer, and you see why farming right now is not so profitable.

	1910-14	1917	1927
Milk	38%	48%	37%
Eggs	70%	76%	64%
Potatoes	60%	75%	58%

Costs of distribution have risen in the past three years. Apparently if farmers are to receive higher prices it must be brought about by creating a scarcity, so that retail prices will rise high enough to pay the distribution costs, which are twice as high as before the war, and yet leave the farmer a sustaining price. Better quality products and better grading, greater production per acre on fewer acres, seem to offer solutions to competition.

HORSES

The horse cycle low prices run in periods of about twenty-five years. The last low point was 1920, preceded by 1895. The trend has started upward and should reach peak of high prices about 1937 to 1940.

SHEEP

Sheep have periods of high and low prices lasting about four to five years. On January 1st, 1928, the purchasing power of sheep was the highest ever known. The number increased nearly three million in 1927. It is probably a very bad period now to begin sheep raising.

POTATOES

Acreages and prices generally fol-

low closely. Acreage in 1925 was low—prices averaged \$1.87. Acreage in 1927 high—U. S. price \$96. Farmers plan to increase acreage 7% in United States, 1928. If they do, the price will likely drop to the marginal point. New England farmers plan a 14% increase in acreage. It costs about 80c to produce a bushel of potatoes on basis of 200 bushels per acre. Better stick to present acreages.

FEED

Further advances are likely.

HOGS

The result of increasing the supply of hogs is being tried again for the tenth time since 1860. The answer is the same as in the other nine cases. More hogs always bring less money. A further increase in numbers will likely result in a further decrease in prices. The hog cycle is five to eight years. The low may occur about 1929 and the high point about 1933.

DAIRY CATTLE

The main centers of high and low prices of dairy cattle follow very closely the beef cattle curves. The periods of high prices are about sixteen years apart. There was a high point in 1899—another in 1915. It is likely that dairy cattle prices will continue to rise until a peak is reached about 1930 or 1931. Due to the unusual shortage, it is also likely that prices will be higher than any previous peak.

We may expect that there will be a rapid increase in interest in pure-bred cattle, and the price of such cattle reaches a peak about two years after ordinary cattle. The price cycle for pure-breds is more violent than for grades. Probably raising

pure-breds will be profitable until 1932 or 1933, but watch out after that.

Dr. Warren states: "The present shortage of cattle is primarily due to prices rather than to the tuberculin test. Probably not over half the cattle condemned would now be on hand had there been no testing."

EGGS

The number of hens and pullets are about the same as a year ago. Probably prices of eggs will be higher than last spring. Feed costs will likely be high. It is well to keep going, but not the time to expand much.

VEGETABLES

Present indications are that competition from regions shipping to New England markets will increase. Seed companies report an increase of sales in New England. Onion prices will likely be low. Moderate reduction in cabbage is advised. Those growers who refuse to ship only the highest quality produce, well graded and attractively packed may expect even more unfavorable returns and, perhaps, may go out of business. The New England grading program offers an effective means of meeting this situation.

There has been an increase by sale from seed companies of sweet corn, spinach, beans, radish, cauliflower, carrot, beet and tomato seed over sales last year. There has been a decrease in the sale of pear and celery seed. Other seeds have sold about the same.

FUTURE PRODUCTION

"Pearl estimates that the population of the United States will increase 65% by 2028 or 100 years hence." More lime, fertilizers, and drainage will produce more food. The nationwide agricultural depression is so interfering with future production that another period of "high cost of living" seems inevitable. Such a period will probably begin by 1930 or before. Such a period is likely to mislead the public as to the necessity for the use of inferior lands. When a period of high food costs occurs, it will be due primarily to the cessation of improvements of good land. The remedy will not be re-occupation of inferior land, but larger yields on lands already in use. This was demonstrated by the abandonment of land from 1900 to 1920. There will always be cycles of too rapid and too slow development, but in agriculture these cycles are very long.

BETTER HOMES DAY**JUNE 13****MARGARET SLATTERY TO BE
THE SPEAKER**

Be sure and mark a ring around this date. If you have never heard Miss Slattery you cannot afford to miss her this time. If you have heard her, you know the pleasure in store for you.

CHILDREN'S CLOTHES EXHIBITS**PROJECT LEADERS SHOW FINE RESULTS**

One hundred and twenty women attended an exhibit in the Amesbury High School, of work done in the Children's Clothes Project, under project leaders. In the morning a demonstration in machine attachments was given by representatives from the Singer Sewing Machine Company. In the afternoon there was a Junior Style Show and a talk on Clothing and Health by Miss Cooley, State Clothing Specialist. A luncheon was served by the students of the Home Economics Department of the High School. The communities participating were Amesbury, Byfield, Newbury and West Newbury.

At the Annual Exposition of the Amesbury Chamber of Commerce the Amesbury groups displayed an exhibit in a most attractive booth.

BETTER KITCHENS IN ESSEX COUNTY**WOMEN MEET TO STUDY PROBLEM**

Several training conferences in Kitchen Improvement will be conducted for Project Leaders during the spring months. Mrs. Harriet J. Haynes, Home Management Specialist, will conduct the conferences in the northern part of the county and the Home Demonstration Agent those in the southern part. The following communities are organizing groups: Beverly, Manchester, West Newbury, Riverside, West Boxford, South Groveland, Danvers, West Peabody.

COLOR IN THE HOME*(Continued from page 1)*

ily, as well as to the casual visitor. Use color everywhere this spring and summer and enjoy it to the full, hoping that fickle fashion will never again condemn us to the drabs, taupes and grays of past days.

—ELLA S. MORRILL.

**HOME NURSING COURSES
START IN APRIL****MISS LUCINDA BOUSLEY WILL BE
INSTRUCTOR**

We have been fortunate in again obtaining Miss Bousley as instructor for our Home Nursing Courses. The communities of Danvers, Middleton, Cliftondale, Amesbury, and South Groveland will carry this project.

**EXTENSION GROUPS ROUND
ABOUT THE COUNTY**

Spring clothing groups are busy all around the county. Groups are scheduled in South Groveland, Danvers, Ipswich, Essex, Newbury, Byfield, and Cliftondale. Riverside and Danielsville will take up garment finishes, and Boxford will have a two days' clothing clinic.

Amesbury and Marblehead are interested in the nutrition project, and Groveland, Riverside and Danvers have started spring millinery.

**MISS FOLEY CONDUCTS
A GROUP IN MARBLEHEAD**

Marblehead women are fortunate to have Miss Mary E. Foley, State Nutrition Specialist, conduct a course in Food Selection. There were forty women present at the last meeting. Signs of Good Nutrition was the subject of the meeting.

PRIZE SPEAKING CONTEST

The semi-finals for the County School Districts in the State Prize Speaking Contest for agricultural students will be held at Horticultural Hall, Boston, on March 30, at 2 P. M.

Three students from this school, Peter Pasukonis, Rowley, Clifford Bryer, Saugus, and Nathan Hale, Rowley, will contest against students from the Bristol and Norfolk Agricultural Schools.

**FERTILIZERS FOR
ASPARAGUS BEDS***(Continued from page 1)*

tip-cart loads to the acre may be a light application.

On a cutting bed, a ton of good chicken manure with 300 pounds of muriate of potash and 200 pounds of nitrate of soda is a good season's treatment for asparagus.

**ESSEX COUNTY 4-H CLUB
BOYS LEAD IN EGG
LAYING CONTEST**

Sherburne Pendleton of Ballardvale was first in the small flock division of the Massachusetts 4-H Egg Laying Contest for January. His record was 10 birds, 269 eggs, with an average of 26.9 eggs per bird.

Right on his heels, in the second place, was Curtis Walton of Newburyport, with an average of 26.8 eggs per bird.

In the large flock division, Patsy Filomeno of Haverhill took fourth place, with 86 birds laying 1807 eggs for an average of 21 eggs per bird.

Raymond Ouelette of West Andover was tenth. His 95 birds laid 1729 eggs, for an average of 18.2 eggs per bird.

Every one of these boys must be taking good care of their flocks, or they would not get such results. In fact, these records are better than the majority of the regular Essex County poultrymen.

EXHIBITION SEASON

With the coming of April the leaders of the winter 4-H Clubs—Clothing, Food, Poultry, Handicraft, and Forestry—are beginning to prepare for their final exhibitions.

Every year at the close of the Club project, we have an exhibition of the articles made by the Club members.

This year, Miss Marion Forbes, Assistant State Club Leader, will be in Essex County for two days to judge exhibits.

Mr. George Farley, State Club Leader, will spend three days here, also to judge exhibits and tell Club members more about 4-H Club work.

All 4-H Club members are looking forward to their exhibit, for it is at this time that they receive their 4-H Club pin, which is what every Club member is striving for.

A schedule, showing where and when the exhibits are to be held will be published later.

MOCK TRIAL

The "Mock Trial of a Soil Robber" was presented by the 2-C and 2-D divisions of the agricultural department, on Tuesday, March 6th, under the direction of Instructor Metcalf. This entertainment was valuable from the educational standpoint as the regular court procedure was carried out in detail.

ESSEX FARMER AND HOMEMAKER

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VOL. 9

HATHORNE, MASS., APRIL, 1928

NO. 4

CARE AND RENOVATION OF CLOTHING

As long as the average woman at home has no direct source of income and her chief duty is in caring for the home and its occupants, she will no doubt consider that making at least a part of the clothing used by her family, also the proper care and renovation of clothing, is a wise way of conserving the family income.

From a survey made by Teachers' College it was found that families whose income was between \$2500 and \$3000 made more garments at home than those of lesser income.

Conservation of clothing begins with the buying. When buying material, or garments consider the wearing quality of the material, the fastness of the dye, rather than the prevailing style in color and weave.

Linens, ginghams and voiles which spot or lose their shape when wet, should be sponged and shrunk before making up.

Always shrink wool material before cutting into the fabric. A good way is to place the wool material, folded through the center, on a wet sheet, roll tightly, let it stand an hour, then press, covering material with a dry cloth.

Proper laundering has much to do with the conservation of clothing and household linen.

When a person goes into a store and asks about the washing of different silks, invariably the reply is the same, "We know it will wash all right, under proper treatment, but we do not guarantee it, as so many people do not know how to wash silk fabric properly."

In the first place do not allow any garment to become too badly soiled and spotted. Use lukewarm water. Never rub soap directly on to the garment, use it in solution. Choose a good drying day, thoroughly dry and press with a warm iron having the silk covered with a press cloth which is nearly dry.

Proper fitting has a great deal to do with conserving the life of the garment. Be sure there is plenty of room for body motion across the back of the shoulder. It is important to have sleeves properly fitted, if the garment is to give the maximum wearing qualities. There should be ample room for the curves of the body when sitting. Knowledge of how to properly repair and renovate

clothing and house linen should be a part of every woman's education.

—MRS. MYRTLE R. DUNN



BROODER HOUSE WITH WIRE SUN PORCH

The accompanying picture tells, better than words, of a new and most practical type of "sun-porch" or "chick-walk." It is made with a floor of half-inch mesh hardware cloth, a square-mesh galvanized wire.

With newer knowledge of nutrition and better appreciation of the anti-rachitic influence of direct sunshine, sun-porehes on the front of brooder houses came into favor, especially on commercial poultry farms of the East. They are used with both permanent and portable houses.

These out-of-door runs of about the same size as the brooder house floor serve the purpose of getting chicks out into the direct rays of sunshine. The additional area provided also relieves congestion and permits fresh air and relief from the constant heat of the brooder stove, thus tending for faster growth and better feathering. At the same time they have the sanitary advantage of keeping chicks off the ground the first few weeks and protecting them through their most susceptible period from coccidiosis, blackhead and intestinal worm infection.

WIRE BETTER THAN WOOD OR CEMENT

Cement or board platforms require frequent cleaning. Droppings sparkle in the sunlight and chicks eat them apparently even more than they do inside. On warm, sunny days board or cement platforms get too hot for comfort. The half-inch mesh wire eliminates these objections. Rain and droppings go through. They do not

BETTER HOMES IN AMERICA

GROVELAND TO HAVE A DEMONSTRATION HOUSE

Many Essex County rural communities are cooperating with the Better Homes in America movement. Among them are Cliftondale, Peabody, Essex, Danvers, West Buxford and Groveland. Groveland is to have a demonstration house under the direction of Mrs. George Mitchell, Mrs. A. H. Amazeen and Mrs. Gardner Wood. The house will be completely furnished by Haverhill merchants as if for a family of modest means. A program of lectures and demonstrations will be given every day throughout the week of April 22. Talks on the following subjects will be given: "Financing the Home," "Convenient Kitchens," "Ornamental Gardening," "Labor Saving Appliances," "Music in the Home," "Child Guidance," and "Home Flower Gardens."

This will furnish a fine opportunity for community chairmen to plan Extension tours to Groveland during Better Homes Week. Lots of fun and helpful suggestions.

—MARION P. CRAWFORD
County Chairman

get hot. Sanitation is complete and labor is reduced to a minimum.

SUGGESTIONS FOR CONSTRUCTION OF WIRE BOTTOM SUN-PORCH

Bottom made in one or two sections. Use 3-inch furring on edge, spacing the furring strips 18 inches apart for 36-inch hardware cloth and 15 inches apart for 30-inch hardware cloth. These are the most common widths. The wire gives enough rigidity, so cross pieces for re-enforcement between the strips of furring are not necessary, although they are probably worth while.

Each side should be a single frame 2 feet high, if the top is covered with high. Otherwise 4-foot wire may be used to enclose chickens on the platform.

If feeding is to be done on the outside of wire, a frame for one side should be made of vertical strands of 8 to 10 gauge wire spaced 1½ inches apart.

—WM. C. MONAHAN.

Essex Farmer and Homemaker

HATHORNE, MASS.

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M. P. Crawford, Home Demonstration Agent
R. B. Ewing, County Club Agent

CALENDAR

April 30-May 7—Recess for the Home-making Department.
May 26—Junior High School Field Day at School.
June 13—Better Homes Day at the School.
June 16—H Club Field Day at the School.
June 20—Parents' Day in the Home-making Department.

SECOND ANNUAL JUNIOR FIELD DAY

The Essex County Agricultural School will be hosts to the members of the graduating classes of the Junior High Schools and eight grade rural schools on Saturday, May 26. Athletic events and an historical pageant are in prospect. An opportunity to see the school farm and livestock will also be given.

NEW ENGLAND INSTITUTE OF COOPERATION TO BE HELD AT AMHERST

The date for the second annual New England Institute of Cooperation, to be held at the Massachusetts Agricultural College, Amherst, has been set for June 26-29. The first meeting of the institute was held last year at the Connecticut Agricultural College at Storrs.

Farm leaders, members and officers of cooperative associations, extension workers, and agricultural instructors will meet to discuss various aspects of cooperative buying and selling in New England.

BECOMES PRESIDENT OF BEEKEEPERS

Instructor George A. Meigs was elected President of the Eastern Massachusetts Society of Beekeepers at their recent annual meeting in March for the ensuing year. The Society was established in 1906 embracing all the eastern part of Massachusetts. They hold their monthly meetings in the State House, Boston, under the auspices of the Massachusetts Department of Agriculture.

WEATHER REPORT FOR FEBRUARY-MARCH

	February 51 (4th)	March 66 (24th)
Max. Temperature	—4 (26th)	8 (4th)
Min. Temperature	25.3	33.8
Average Daily Tem.	28.5	35.6
Normal T. (Boston)	31° (13th)	39° (24th-27th)
Greatest T. change in 1 day	6° (10th)	4° (30th)
Least T. change in 1 day	3.18"	1.71"
Inches of Rainfall	3.44"	4.08"
Normal for month (Boston)	..	7.35"
Total for year to date (April 1)	..	11.34"
Normal for year to date (Boston)	..	3.99"
Deficiency for year to date	69.0%	66.6%
Ave. rel. humidity	8 A. M.	
Number clear days	8	8
No. partly cloudy days	16	19
No. days no sun	5	4
No. days on which rain fell	9	12
Total hours sunshine	161	218
Per cent sunshine	54.4	58.9

February and March have averaged much cooler than the corresponding months of 1927. Rainfall has been about the same and this year has now accumulated a shortage of nearly 4 inches, almost exactly the same as 1 year ago. The amount of snow was two inches less and the amount of sunshine about 40 hours more this year than last, for the two-month period. Relative humidity about the same.

—HAROLD A. MOSTROM.

A. A. MEETING

The annual meeting of the Athletic Association was held on March 28, 1928. The retiring president, Henry Roberts, in a few well-chosen words welcomed the incoming president, Llewellyn Jones, who then installed into office Lester Knowlton as vice president, Enaise St. John as secretary and Helen Belanger as historian. Mr. Mostrom was returned unanimously to his present position as treasurer.

The members voted to reduce the annual membership fee, to restrict the wearing of letters from Schools other than Aggie and to put themselves on record as loyal supporters of the football team.

—PHILIP COUHG

HONOR STUDENTS 1927-28

AGRICULTURAL DEPARTMENT

The following students' names have appeared on at least one of the honor rolls issued at the end of each term. Those names which are starred twice have been on all three honor lists while those with one star have appeared twice. To be on the honor roll, a student must have obtained at least 18 credits out of a possible 21 each term.

Seniors

*Stanley Emerson	Rowley
**Joseph Finocchio	Danvers
**Thomas Gould	Lynn
*Nathan Hale	Rowley
Paul Iisley	Georgetown
*Charles Marston	Georgetown
**Peter Pasukonis	Rowley

Juniors

Ralph Armstrong	Lynn
**Everett Bean	Haverhill
*Arthur Gordon	Rowley
Maynard Haley	Rowley
*Llewellyn Jones	Haverhill
*John Kelly	Groveland
**Courtland Laughton	Haverhill
**Robert Moulton	Lynnfield
*Michael Paskowski	Salem
*Henry Roberts	Manchester
Eino Sormunen	Peabody
*Raymond Turner	Haverhill
**Stanley Ward	Saugus
*Robert Winkley	Newbury
Donald Williams	Middleton

IIC—IID

Helen Belanger	Haverhill
Clifford Bryer	Saugus
Lorimer Hilton	Saugus
Clement Lambert	Upton
*Ida M. Perkins	Haverhill
*Alexander Swinarski	W. Peabody

Freshmen

**Harold Bowen	Ipswich
*Donald Driscoll	Peabody
*John Ellis	Peabody
Harold Lundberg	West Newbury
Henry Marston	Middleton
**Theodore Paskowski	Salem
Bradford Silsby	Haverhill
*Roland Stiers	Andover
Lewis Williams	West Newbury

STUDENTS FORM BEE CLUB

Members of the Beekeeping class have stimulated so much interest in bees, among their fellow students, that there has been formed the Essex Aggie Bee Club, open to students of all classes. Officers were elected as follows:

President—Everett Bean, Haverhill
Vice-President—Clement Lambert, West Upton
Secretary—Lorimer Hilton, Saugus
Treasurer—Kenneth Dawkins, Groveland

Auditor—Edward Batchelder, Cliftondale

Faculty Sponsor—George A. Meigs
Meetings are being held during the Wednesday special periods. Questions in beekeeping are raised and discussed by the boys. Eighteen out of the total membership of forty-five are going to have either an ownership project in beekeeping or care for bees on their employed projects.

—G. A. M.

CROP RECORDS PROVE VALUABLE

You may think you are acquainted with the inhabitants of your vegetable garden, but the "Crop Record" will surely help you to become much better acquainted.

Keep an orderly, compact, interesting and instructive "Crop Record" of your crops. Below is a sample record actually used by the writer on his home farm.

—E. E. METCALF.

CROP RECORD

Kind and Variety	Source of seed	Date planted or set	Date well up	Days to come up	Date began blooming	Date of first harvest	Days from bloom to harvest	Days from planting to harvest
1926 "Record" Peas	Any reliable company	April 15	May 2	18	June 6	June 28	22	74
1927 "Record" Peas	Any reliable company	March 30	April 22	23	June 4	June 25	21	86
1928 "Record" Peas	Any reliable company	April 6						

GET SWEET CORN EARLY

MAKE SUCCESSFUL PLANTINGS

Many market produce growers in Essex County risk their first planting of yellow sweet corn about April 20 on soil having early characteristics.

Early strains of Golden Bantam are popular for the early plantings. Rows of this variety are planted $2\frac{1}{2}$ feet apart with hills (if hill system is used) 2 feet apart. The small earliest Bantam strains may have the hills only $1\frac{1}{2}$ feet apart thereby increasing the yield of ears per acre by 25%. Where the drill system is used the rows stand $2\frac{1}{2}$ feet apart and the individual stalks should be thinned to stand 5 or 6 inches apart.

Objection is raised that the small Bantam ears do not readily fill the market box. On the other hand, the earliest pickings can be wholesaled at so much per dozen because the demand is keen for the earliest yellow sweet corn regardless of the small size of ears.

It is suggested that you make three divisions in the planting of the earliest yellow sweet corn field. Plant one third April 20, one third May 1, and one third May 12.

If you lose the April 20 planting it can be replanted and the next two plantings will probably have come through all right. "Don't put your eggs all in one basket."

—ELLERY E. METCALF

Corrosive Sublimate Treatment

Dissolve crystals of corrosive sublimate in water at the rate of 1 oz. to 10 gals. of water. Apply about $\frac{1}{2}$ cupful of the solution around stem and base of each plant 3 days after plants are set out in the field. A second treatment must be made 10 days after the first.

Caution. Corrosive sublimate is a deadly poison if taken internally! Use care! It quickly corrodes metal, therefore use wooden, crockery, or glass containers.

To dissolve the corrosive sublimate rapidly, stir it into a gallon or two of hot water. When dissolved add this solution to enough cold water to make the strength stated above. Apothecary stores sell corrosive sublimate.

—ELLERY E. METCALF

CUT-WORM CONTROL

Poisoned baits prove to be the best method of controlling cut-worms. A common bait is made with the following materials:

Bran 10 lbs.
 Arsenate of lead powder $\frac{1}{2}$ lb.
 Molasses 1 qt.
 Water enough to moisten

The bran and arsenate powder are mixed together thoroughly after which add the molasses and water. Do not add enough water to make the mash sloppy but have wet enough to spread easily.

Apply mash to fields of asparagus, tomatoes, peppers, etc., late in the day so that it will not dry out before night as the cut worms feed and do their damage at night.

Caution: The bait should not be used where there is danger of chickens getting it.

Clean cultural methods and fall plowing aid in controlling cut worms.

—C. M. STEARNS

WOOD FARM HEIFER MAKES HIGH RECORD

In the Essex County Cow Test Association a very high record is being made by the Wood Farm September Morn, a two-year-old heifer, with a production of 32.5 pounds of butterfat a month, equivalent to over two pounds of butter per day. This record should increase considerably as she comes into her full flush of milk is the opinion of Herbert Kirk, a student at the Essex County Agricultural School.

Such a high production is almost inevitable from her exceptional breeding as through four sons of Sophie 19th, she traces five times to Sophie 19th, the famous world champion cow over all breeds, an Essex County cow whose progeny has been shipped all over the world. The milk of September Morn is now testing 5.7% fat, which should bring her average for the year to over 7%. This extreme richness is characteristic of her immediate family, as her maternal granddam has an official average of 6.84% for the year, on Register of Merit Test. This percentage which ranks the highest among the three hundred officially tested granddaughters of Sophie 19th, a percentage equalled only by the world-beating Jerseys of Oregon on the Pacific Coast.

A full brother of September Morn heads a large herd in Dayton, Ohio, and three full brothers of her dam have been shipped from Hathorne to head herds in Western Massachusetts, to Illinois, and to Iowa.

The Sire of September Morn is Golden Fern's Noble Sovietor, apparently a bull of unusual merit, as another two-year-old daughter is making forty pounds of fat per month, placing her also among the high producers of the breed.

On account of the dispersal sale of Hood Farm, this bull was born at Wood Farm, but was originally intended to blend heavy production and show-ring type at Hood Farm. As his name indicates he is a grandson of Sophie 19th Victor. He is also a grandson of the greatest show bull that ever lived, Imported Golden Fern's Noble, champion over the Island of Jersey, and in America National Grand Champion, as were also his sire, his son, and his grandson.

—F. C. SMITH

FIGHT! FIGHT! FIGHT!

CONTROL THE CABBAGE MAGGOT!

It is pretty generally known among gardeners that there is now a satisfactory method of controlling the cabbage maggot. Nevertheless each year many growers neglect to battle with this pest. Maggot injury was especially serious last year.

The Eastern Massachusetts Society of Beekeepers will hold their summer field day at the Essex County Agricultural School in August.

WOMEN'S EXTENSION WORK

FIRST MEETING OF THE ESSEX COUNTY
HOME ECONOMICS EXTENSION
COMMITTEE

The first meeting of the newly organized Extension Committee was held at the Agricultural School on March 30. The following officers were chosen for one year: Chairman, Miss Marion Parker of the Beverly Health Center; Vice-Chairman, Mrs. E. Robert Little of Boxford, and Secretary, Mrs. C. S. Wright of Danvers.

This committee will act as an Executive Committee, cooperating with the Home Demonstration Agent and community chairmen in planning an organized county-wide extension program. They will meet bi-monthly. New members of this committee will be elected each year at the annual extension meeting in May. The names of the Committee with their length of service is as follows:

Mrs. C. S. Wright, 9 Beacon Street, Danvers,—3 years; Mrs. Horace Brown, West Newbury—1 year; Mrs. H. K. Richardson, Middleton—2 years; Mrs. E. Robert Little, Boxford—3 years; Mrs. George Mitchell, Groveland—3 years; Mrs. E. K. Hayden, Cliftondale—3 years; Mrs. Irving Johnson, Rowley—1 year; Mrs. Fred P. Kilham, Hamilton—2 years; Mrs. Bernard Manning, Amesbury—2 years; Miss Marion Parker, Beverly—1 year.

We consider ourselves fortunate in securing the acceptance of these women and feel that this is a move in the right direction toward a better and broader Extension Service to the women of Essex County.

FINE ENROLLMENT FOR BETTER
KITCHENS

A group of women are already improving their kitchens, although only two meetings have been held in the Better Kitchens course by Mrs. Haynes, the State Specialist, and Miss Crawford, the Home Demonstration Agent. Several women, by routing their kitchens, have found that many steps could be saved just by re-grouping small kitchen utensils. One pantry has been made bright and cheerful by a coat of cream-colored paint, which takes the place of a dark, gloomy color.

One hundred twenty women are studying their kitchens under the following project leaders:

Mrs. F. M. Spofford, South Groveland; Mrs. E. E. Gentleman, South Groveland; Mrs. B. W. Farnum, North Andover; Mrs. L. G. Dodge, West Newbury; Mrs. Lucy Poore, West Newbury; Mrs. H. E. Moores, West Box-

ford; Mrs. C. F. Austin, West Boxford; Miss L. M. Cameron, Riverside; Mrs. P. A. Callahan, Riverside; Mrs. B. P. Danforth, West Peabody; Mrs. Harry W. Rankin, West Peabody; Miss Marion Parker, Beverly; Miss Elizabeth Smith, Beverly; Mrs. Chas. Turner, Beverly; Mrs. Alvah Bradstreet, Beverly; Miss Maidee Polleys, Essex; Mrs. Maud Burnham, Essex; Mrs. Harry Floyd, Manchester.

ANNUAL MEETING OF WOMEN
EXTENSION WORKERS

The annual meeting of the workers in the Extension Department will be held at the Essex County Agricultural School on Tuesday, May 22. This includes Town Chairmen, Project Leaders, and Committees. Reports will be given by all the active Town Chairmen.

CLUB CHAMPIONS

With the coming of Exhibition Season every 4-H Club member is wondering who will be the Clothing Champion? Who will be the Poultry Champion?

What do they mean by Poultry Champion? Clothing Champion?

This is what they want to know. What 4-H Clothing Club girl in Essex County has done the best job? Not necessarily sewing, but has she helped the other Club members? Does she help the Leader? Has she good Club spirit and has she that elusive quality of stick-to-it-iveness that so many Club members lack? Does she finish her job, once she has started? These are all questions that confront the Club Agent at this time of year when Club Champions are picked. Perhaps she has led a Club of girls. What sort of a job has she done? Is she worthy of being called a County Champion?

All of these qualities apply to the Poultry, Food, Handicraft, etc., Champions, as well as the Clothing Champion. For all Champions have about the same championship qualities, even though they are in different Clubs.

So be on the lookout for the list of Essex County 4-H Club Champions and then watch for the story of each champion.

—ROBERT B. EWING
County Club Agent.

NEWS NOTES

Mrs. Ella S. Morrill, head of the Homemaking Department, spoke on the School and its work recently before the Woman's organization in the St. John Episcopal church, Broadway, Lawrence, and at Christ Church, Bradford.

SCHEDULE OF 4-H CLUB EXHIBITS

Following is a schedule of exhibits that are to be held by 4-H Clubs throughout Essex County during the month of May. Everyone interested in 4-H Club Work should plan to attend at least one of these exhibits.

If you are not acquainted with 4-H Club Work here is your opportunity to see what Essex County 4-H Club members have been doing.

May 16—West Boxford—2 p. m., Morse School

North Andover—4 p. m., Health Center

Georgetown—7 p. m., Grange Hall

May 17—Middleton—10.30 a. m., Center School

North Andover—12.00 a. m., Kimball School

West Newbury—3.30 p. m., Central School

Groveland—7.00 p. m., Merrimack School

May 22—Andover—3.30 p. m., Stowe Junior High

Byfield—7.00 p. m., Town Hall

May 23—West Andover—2.00 p. m., North School

Gloucester—4.00 p. m., High School

Newbury—7.00 p. m., Parker Hall

May 24—Rowley—10.30 a. m., Center School

Ballardvale—3.00 p. m., Bradlee School

Methuen—7.00 p. m., Marsh Corner School

May 25—North Andover—10.00 a. m., Pond School

North Andover—12.00 a. m., Farnham School

West Newbury—2.00 p. m., School No. 9

Newburyport—7.00 p. m., Currier School

These exhibits are all public and everybody is welcome. Find the nearest exhibit and then attend.

Miss Ruth Erickson, head of the Cooking Division, spoke on food values before the Woman's Club of West Newbury recently.

Miss Frances Martin, '24, Lynn, and Mrs. Martin visited the Homemaking Department on March 15.

Mrs. Evelyn Sawyer Farrin, '24, and Frances Brown, '22, were also guests of the School on March 15. Graduates and any students who have ever attended the School are urged to visit often and to keep in touch with the work being done in their School.

Visitors are welcome in the Homemaking Department and the latch string is always out to all women in the County who are interested in the problems of homemaking. That includes every woman, doesn't it? Then come.

ESSEX FARMER AND HOMEMAKER

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VOL. 9

HATHORNE, MASS., MAY, 1928

NO. 5

SECOND ANNUAL JUNIOR HIGH SCHOOL DAY AT HATHORNE, SATURDAY, MAY 26

On Saturday, May 26, the School will entertain the members of the graduating classes of the grammar and Junior High Schools of Essex County. The idea of setting aside one day at this season of the year to entertain the young people of the County is a new one, having been tried out last year for the first time.

The program for the day promises to be even more attractive than last year. In the morning groups of visitors will be conducted over the School farm; agricultural and homemaking contests will be held, and the farm livestock will be exhibited on the lawn.

JAPANESE PAGEANT

In the afternoon the Homemaking Department will present a two-act operetta, "The Japanese Girl." This play is particularly adapted for outdoor presentation and if the weather permits the school lawn will be transformed into a Japanese garden and the play presented out-of-doors.

Following the entertainment, an athletic program will be carried out, under the direction of Instructor Conhig. The events for boys will be 75-yard dash, egg and spoon relay, running high jump, and shuttle relay. The girls' events are 50-yard dash, basketball throw, all-up relay, and shuttle relay. Ribbons will be awarded to the first five winners in each event and certificates will be given to every boy or girl taking part in the meet.

ESSAY CONTEST

Because so many compositions were received from boys and girls who visited the School last year, an essay contest has been arranged as part of the General Field Day program.

Any boy or girl who visits the School on May 26 may submit an original essay not to exceed 500 words in length on one of the following topics: "How I Spent a Day at Our Essex County Agricultural School," "A Profitable Junior High Day," or "What I Observed at the Essex County Agricultural School." Prizes will be awarded to the boy and girl submitting the best essays.

Over 800 boys and girls and grown-ups attended our first annual Junior High Field Day last year and it is expected that even a larger number may attend this year.

The organizing of groups is left with principals and teachers in the different schools of the County.

Visitors to the School on that day are requested to bring lunch as only light refreshments will be for sale.

COMING EVENTS

AT HATHORNE

JUNIOR HIGH SCHOOL FIELD DAY

Saturday, May 26

FARM TOURS
AGRICULTURAL AND HOMEMAKING CONTESTS

EXHIBIT OF LIVESTOCK
PAGEANT (HOMEMAKING DEPARTMENT)

ATHLETIC EVENTS

Graduates of Grammar and Junior High Schools Invited

BETTER HOMES DAY

Wednesday, June 13
Women's Section Extension Department

4-H CLUB FIELD DAY

Saturday, June 16

PARENTS' DAY

Homemaking Department
Wednesday, June 20

4-H CLUB FIELD DAY

Every 4-H Club member in Essex County is looking forward to the Annual Club Field Day. This year it will be June 16 and will be held as usual at the Essex Agricultural School.

A new feature this year will be the Club Song Contest. All of the Clubs have been singing more than ever this past season and they are all looking forward to this contest. Each Club will be required to sing "The State Song" and one other song that they may choose.

The athletic events will be in the afternoon, and a large number of the Club members are planning to enter them.

BETTER HOMES DAY, JUNE 13

MARGARET SLATTERY TO BE THE SPEAKER

Be sure to mark June 13 on your calendar. Not because it is an unlucky day, but to remind you that it promises to be the luckiest day of the year for Extension women in Essex County. Last year we had a big attendance at Better Homes Day. This year as our Extension family has grown we are planning for an even larger attendance.

Margaret Slattery will of course be the big attraction. No one in this part of the country has a better and finer message for the homemaker than has Miss Slattery. She spoke in Worcester County last year and the Home Demonstration Agent says they consider that meeting one of the finest they have ever had. Miss Slattery will speak on "Sons of Women and Daughters of Men."

Of course, Better Homes Day without a community play would not be complete. This year the women of West Boxford will present the play. They will have to work hard to take the laurels from Amesbury and "Mrs. Radio," but West Boxford always "puts it over."

In place of our usual exhibits this year we are planning demonstrations which will illustrate the different types of work conducted by the Extension Department. High spots in our clothing, nutrition and home management projects will be demonstrated by county women.

As usual, a basket lunch will be in order. Ice cream and milk will be on sale. Bring all your friends and help give and receive a real inspiration for Better Homes in Essex County.

ANNUAL PARENTS' DAY

The date of the annual Parents' Day is set for June 20. An interesting day's program has been planned, and the girls are now busy with preparations for a Japanese operetta to be given that afternoon.

We cordially invite parents and friends to be with us on that day, and this is the day that we all bring a basket lunch. Punch will be served to all and ice cream will be on sale.

Essex Farmer and Homemaker

HATHORNE, MASS.

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EXTENSION SERVICE

F. C. Smith, County Agricultural Agent
M. P. Crawford, Home Demonstration Agent
R. B. Ewing, County Club Agent

CALENDAR

May 26—Junior High School Field Day at the School.
June 13—Better Homes Day at the School.
June 16—4-H Club Field Day at the School.
June 20—Parents' Day at the School.
June 26-29—New England Institute of Co-operation at Amherst.
July 23-27—Agricultural Instructors' Conference at Amherst
July 24-27—Farm and Home Week at M.A.C.

GEOGRAPHICAL DISTRIBUTION OF OUR ALUMNI

Of the 435 living alumni of the school 171 agricultural and 165 home-making graduates—a total of 336 are now residents of Essex County. From these figures we see that by far the largest proportion like our own county best. Fifty more have not gone out of the State of Massachusetts. Thirty-two are listed as living in other New England states and only fourteen have strayed away from New England. We have been able to locate all but three of our alumni.

CONCERNING THOSE MARRIED

Of the 435 living alumni of this School, 129 are married. Of these 71 are graduates of the Agricultural department, while 58 are Homemaking graduates. That this School offers plenty of opportunity for the students to get acquainted is borne out by the fact that 17 marriages are reported in which both the husband and wife were students at this School.

Eight of these marriages have been between graduates of the same class. We append a list of the marriages in which classmates figure:

1923—Mr. and Mrs. Robert B. Ewing (Anna K Sanford).

Mr. and Mrs. Wendall R. Murray (Marie Pension).

1920—Mr. and Mrs. Dana Killam (Rachael Foster).

Mr. and Mrs. J. Roy Osborne (Grace Hartman)

Mr. and Mrs. Winthrop E. Sargent (Margaret Wallace).

1922—Mr. and Mrs. Leighton H. Allen (Marion Severance)

1926—Mr. and Mrs. Roscoe B. MacKenna (Thelma Sewell).

1926—Mr. and Mrs. Stewart Cogswell (Marjorie Hawkes).

ALUMNI NOTES APRIL 1923

We have recently heard from some of our four hundred and fifty graduates but wish that the total number writing had been even larger. We will try to give you the new information which these welcome letters contained.

HARRY R. TUCKER, '24, writes that he was married to Miss Kathryn Sargent of Beverly in 1927. Their address is 151 Essex Street, Beverly.

HENRY ELLIS, '27, is foreman of the ice cream plant of the Dairymen's League Cooperative Association. This plant has a manufacturing capacity of about 5000 gallons per day. The annual production of the "Dairy-lea Ice Cream" is from 400,000 to 500,000 gallons. He lives at 1212 Howard Avenue, Utica, New York.

SAUL FREEDMAN, '17, is now a practicing physician in New York City. He attended Ohio State University after leaving Aggie and was later graduated from Boston University, School of Medicine.

MR. and MRS. WALTER MOORE (Eleanor Breed, former teacher in the Homemaking Department) are now living at 8 Suvance Road, East Weymouth, where Mr. Moore is engaged in the real estate and insurance business.

LUTHER MARTIN, '16, is a strong booster for the dairy business. He is located at 22 Pond Street, Marblehead, where he is carrying on a very successful dairy.

CARL D. PRIPPS, '21, has joined the Chedco Farm in Berlin, Mass. His work is in the new fruit division which they are opening. Another Aggie graduate at the Chedco Farm as Assistant Herdsman is ROLAND PLUMMER, '25.

EDWIN E. BERGSTROM, '19, 6 Porter Street, Rutland, Vermont, is still doing 4-H Club work and has for the last two years taken dairy judging teams to the National Dairy Expositions in Detroit and Memphis.

JAMES L. ("HAP") ROGERS, '21, is head poultryman on the Lakeside Farms, Winthrop, Maine, R. F. D. No. 22. This is one of the largest and most diversified farms in the Pine Tree State. He expects to have some 12,000 chicks this year.

The two "BILLS," ABBOTT of '16 and CHESLEY of '18, are still in Lancaster, N. H. Chesley runs a variety store and Abbott is with the American Milling Company in charge of Coos County, N. H., and Essex County, Vermont. They invite any "Aggie" people to stop off when in New Hampshire.

CARL STANTON, '16, Box 207, Peterborough, N. H., is doing quite a bit of lecturing before clubs or groups interested in landscape gardening.

STANLEY DEQUOY, '17, is living at 22 Maple Street, Woodsville, N. H. He would enjoy hearing from "Aggie" people, especially members of the 1917 class. The 4-H Club work still holds DeQuoy's attention.

FRED H. WALKER, Jr., '27, is returning to the Melrose Highlands Entomological Laboratory this summer.

JAMES H. SEELEY, '17, and his wife (LAURA E. RICHARDS, '20), are living at 103 Church Street, Laconia, N. H. Mr. Seeley is manager of one of the branch stores of Cole's Dry Cleansing Company.

WILLIAM E. STOWELL, '25, is still in the shipping room of J. B. Blood's and lives at 604 Western Avenue, Lynn.

"PHIL" ARMITAGE, '27, is enjoying work at Henry A. Dreer's and is living at 508 Cinnaminson Street, Riverton, New Jersey.

JOHN H. LOVETT, '18, has bought the Saunders Ice Cream Company at 53-55 Washington Street Gloucester. He invites all "Aggie" men to drop in to see him when in that Cape city.

CHANDLER BODWELL, '26, is poultryman on the Winslow Farm, Andover.

Over 77% of the graduates of this School reside in Essex County. Many of them drop in to see us when near Hathorne. We are always glad to see them and hope that others will get the habit, too.

—Miss G. H. WRIGHT

IMPORTANT SUMMER MEETINGS

June 26-29

NEW ENGLAND INSTITUTE OF
CO-OPERATION
M. A. C., Amherst

July 24-27

TENTH ANNUAL SUMMER
FARM AND HOME WEEK
M. A. C., Amherst

NITRATE OF SODA

PLANTS "GET A KICK OUT OF IT"

Vegetable growers know, that on the average, early plantings have had to be made later this spring than usual. Such a condition may cause produce that ordinarily is marketed ahead of the main crop, to be retarded enough to arrive on a market fairly well supplied at a relatively lower price.

Are you one of the growers who understands the use of nitrate of soda as a stimulant to plant growth?

It is immediately soluble in soil moisture and provides the plant food element, Nitrogen, which stimulates a rapid succulent foliage growth.

The "kick in it" is such that two or three hundred pounds per acre is all that should be applied at one time.

To apply it with the least labor it should be broadcast on a dry day. The crystals will rebound off the dry foliage. If foliage is moist, the crystals will tend to stick and burn.

Cultivating immediately after applying will bring it into contact with soil moisture and hasten its beneficial action.

A second application about two weeks later often pays additional dividends.

—ELLERY E. METCALF.

GIVE THE TOMATO PLANTS A SHOW

"What is worth doing at all is worth doing well"—even setting out tomato plants.

Be one of the growers who takes pains and pride in transplanting the tomato plants into the field in such an efficient manner that they don't show, or know, that they have been moved. It *pays*.

If the plants are in individual plant holders the job is easy.

If they are not in individual containers, the best growers take time to give them a thorough watering just before the transplanting. Water enough is used to soak well down around the roots. Each plant can then be carefully trowelled up and a good "mud ball" moulded about the roots.

Placing the plants side by side in boxes, careful hauling to the field and immediate setting, will insure satisfying results.

If someone else is raising your plants for you, insist on having them thoroughly watered just before you go for them.

Provide enough boxes and carrying space so that you can transport them "mud balls" and all.

ELLERY E. METCALF.

MILK MADE THE DIFFERENCE



"Chickens come home to roost," but the little fellow in this picture can't roost very high. He was badly "stunted" in his growth and he couldn't help it because he didn't get any milk. His larger companion of the same "hatch" had milk in his ration, which was otherwise the same.

Some folks might term such an experiment "cruelty to animals," but if it really is cruel to thus treat a chicken how about the millions of children who are denied a plentiful supply of milk? Their parents wonder why they are undernourished and "puny."

ACID PHOSPHATE

IMPORTANT PARTNER TO ANIMAL MANURES

Perhaps you are one of those produce growers with the good fortune to still have an abundant supply of manure.

Perhaps you have considered the manure an economical and all-sufficient source of plant food.

It is low in its content of the plant food element phosphorus. Phosphorus is a plant food element that hastens maturity.

If you have already planted with manure alone as a fertilizer, it will pay to apply acid phosphate as a side dressing after the crop is up, and cultivate it in.

Use about 500 lbs. per acre. It is not expensive, costing about \$22 per ton. Buy the standard grade, which contains 16% available phosphoric acid. One of the best tomato crops ever seen by the writer was grown last year by a Mr. Pomeroy of Lockport, New York. The only plant food used was one ton of acid phosphate per acre. The soil was medium fertile in type.

—ELLERY E. METCALF.

HOME NURSING TAUGHT BY STATE DEPARTMENT OF HEALTH

During Cancer Week, women in Amesbury, South Groveland, Cliftondale, Danvers and Middleton, who are taking the course in home nursing, listened to a short talk on Cancer Control by Dr. G. M. Sullivan and Dr. Lillian G. Gray of the State Department of Health.

WOMEN OF EXTENSION DEPARTMENT TO HOLD ANNUAL MEETING MAY 22 AT HATHORNE

On May 22 the annual business meeting of the women's section of the Extension Department will be held at Essex Aggie. To that meeting are invited the Advisory Council, the Extension Committee, Town Chairmen and Project Leaders. This means about 100 women.

During the morning reports of work accomplished will be made by community chairmen. New business will be transacted with Miss Marion Parker, Chairman of the new Extension Committee, presiding. In the afternoon plans for the future will be given by state representatives and specialists.

We expect to have with us Mrs. Herr, the State Home Demonstration Leader; Miss Wilson, State Department of Education, and Mrs. Haynes, Miss Foley and Miss Cooley, State Specialists in Home Management, Nutrition and Clothing.

Luncheon will be served by students of the Homemaking Department.

BETTER KITCHEN MEETINGS

The groups of women studying ways of improving their kitchens this month have been interested in floors, both new and old. This is one of the homemakers' greatest problems.

One group of project leaders met with Mrs. Lawrence Dodge of West Newbury, and the other with Miss Marion Parker of the Beverly Health Center. The group in Beverly visited two most attractive kitchens. In one, the newest type of electric dish-washing machine was demonstrated.

During the latter part of May a Better Homes Tour will be conducted when efficient homes will be visited. If you would like to come with us, just write your Home Demonstration Agent, Hathorne.

CAN YOU BEAT THIS?

Raymond's Sunnyridge Farms, Amesbury, planted about one acre of Golden Bantam corn, April 13.

On May 3, the writer went over the piece and it appears that a reasonably good stand of corn will come up.

It is located on a gravelly slope, which is no doubt the reason that heavy rains and cold did not rot all the seed.

Does anyone know of an earlier planting of yellow sweet corn made this year, which is coming through successfully?

Last year yellow sweet corn was planted on the Low Estate, Danvers, April 13 and over \$2.00 per box was received for the first picking.

—ELLERY E. METCALF.

A LETTER TO THE MOTHERS OF 4-H CLUB GIRLS

4-H CLUB WORK IS HELPING YOUR DAUGHTER TO ATTAIN HOME IDEALS

Dear Mother:

Your daughter is a member of a 4-H Club. As a member of this club she is pledging her head to clearer thinking, her heart to greater loyalty, her hands to larger service and her health to better living for her club, her community and her country.

She is a member of an organization having 600,000 members in the United States and more than 16,000 in Massachusetts. This organization has its national headquarters at the United States Department of Agriculture, Washington, D. C., and state headquarters at the Extension Service at the Massachusetts Agricultural College, Amherst. If she has been in club work a year or more, she wears a little four-leaf clover pin, the national emblem of club work known to boys and girls in every state in the Union, and in many foreign countries.

You have great hopes and ambitions for your girl. You want her to be keen in mind, strong in body, capable and useful, generous and sympathetic, and happy and interested in her home and in her community. We want you to feel that we are interested in your daughter and have these same ambitions for your girl and other 4-H Club girls.

Some girls are cooking, others are sewing, some are beautifying their rooms and homes. A few are members of clubs in which they learn to care for younger members of the family, and many are learning to do the home canning. These are but a few of the many things which the young girls of our state are learning through 4-H Club work.

Older girls who have received previous training in club work are now local leaders giving aid to the younger members in their communities. Some girls are now in college as a result of money they have earned in club work. County, state, and national camps are held each year and are attended by club members who have proven worthy of higher training, and by local leaders in order that they may go back to their communities and be better fitted to conduct club work.

The opportunities offered to your daughter through club work are many. We are sure that she will be benefited by her work and we are asking you to encourage her to better efforts. Any aid which you can give to your local leader so that she may give her best to the girls in her club will help this worthy cause along.

The leaders of 4-H Club work want to help your daughter and other young girls to develop into wholesome womanhood with higher ideals for the American home.

Will you help us in our endeavor to have better 4-H Club work?

Cordially yours,
MARION E. FORBES
Assistant State Club Leader.

ESSEX STUDENTS WIN RECOGNITION IN FRUIT JUDGING AND PRIZE SPEAKING

The Essex Aggie Fruit Judging Team, composed of Peter Pasukonis, Nathan Hale and Arthur Gordon, all of Rowley, won second place in the fruit judging contest held at the Massachusetts Agricultural College on May 4. The first place went to the Norfolk County Agricultural School. Peter Pasukonis was second highest individual scorer and Nathan Hale fourth. Seventeen teams representing all parts of the state were entered in this event.

SPEAKING CONTEST

In the state-wide speaking contest for agricultural students, held under the auspices of the Department of Education, Essex Aggie students won second and fourth places in a field of eight contestants. The winners in this contest were as follows:

First, Edward Cutting, North High, Worcester.

Second, Peter Pasukonis, Essex County.

Third, Hugh Kenworthy, Bristol County.

Fourth, Clifford Bryer, Essex County.

ATHLETICS

The Advisory Council of the Athletic Association of the School held a meeting on Friday, March 23, 1928. After a short discussion concerning the advisability of awarding letters for athletic sports to students who barely missed fulfilling the requirements, it was voted to be open-minded and liberal in the matter. The following boys have, through practice and participation, earned the School letter "E."

BASKETBALL

Capt. Wilson, Mgr. Baillie, Perault, Rennie, Sturtevant, Nelson, Jaquith, Mooers, and Pasukonis.

HOCKEY

Capt. Danforth, Mgr. Rogers, Roberts, Haley, MacKenzie, Turner and Brown.

Irving Jaquith of Lynn was elected captain of next year's basketball team. He has played two years on the first team and is a regular guard both in basketball and in football. The hockey team declared itself in favor of Henry Roberts of Manchester. He is also a track man, being interested in broad and high jumping.

BRADFORD BURNHAM, ESSEX AGGIE '16, CONDUCTS SUCCESSFUL NURSERY AND LANDSCAPE CON- TRACTING BUSINESS

Few young men of today would think of starting a project in their own back yard and after a few years have it turn out to be a successful business. This is exactly what happened in the case of Bradford Burnham of Essex and a member of the first class (1916) to graduate from this School.

Mr. Burnham has built up a successful landscape nursery and contracting business in the rear of the Burnham homestead at the corner of Story and Belcher Streets, Essex, Mass. Beginning with a small area at first, the business has expanded until now, twenty-two acres are under development.

Since graduating Mr. Burnham has had a varied but consistent business experience in private estate and commercial landscape enterprises. He obtained valuable experience at the Breck-Robinson Nurseries in Lexington, the Rosedale Nurseries in Tarrytown, New York, and also at the Farquhar Company in Boston where he was employed for two years as a landscape designer.

During the last four years he has devoted his attention to building a nursery and landscape contracting business of his own. He now employs six men, one of whom is Fred Bragdon of Essex, also a graduate of this School. Mr. Burnham has also taken on an undergraduate student, Clifford Bryer of Saugus, for the summer.

Although perhaps Mr. Burnham does not feel that he has done anything out of the ordinary, few young men of today would work so hard and sacrifice so much in order to develop a business which takes years to establish. However, Mr. Burnham had the necessary grit and he is amply rewarded, as his business is now on a firm foundation and paying good dividends, all of which indicates that one may find opportunities in his own back yard.

FOOTBALL SCHEDULE 1928

Oct. 5 Peabody
Oct. 12 Swampscott
Oct. 20 Manchester
Oct. 27 Wilmington
Nov. 3 Saugus
Nov. 10 Stoneham
Nov. 17 Salem, N. H.
Nov. 24 Gloucester
Nov. 25 Thanksgiving Day Dauvers

ESSEX FARMER AND HOMEMAKER

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VOL. 9

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NO. 6



Stockbridge Hall and a Part of the Campus, Massachusetts Agricultural College, Amherst, Massachusetts

TENTH ANNUAL FARM AND HOME WEEK AT M. A. C. JULY 24-27

"Wiser Uses of Farm and Home Resources" is the slogan of the tenth annual summer Farm and Home Week, to be held July 24-27, 1928, at the Massachusetts Agricultural College.

Plans for the program are already well under way, with numerous well-known subject-matter authorities on the tentative program. One of the headline speakers definitely scheduled for this year is Liberty Hyde Bailey of Ithaca, New York, author of many books on agricultural subjects and the philosophy of farm life.

Poultrymen are having one of the largest programs during the week. Starting Thursday morning at 9:30 with a general discussion of Newest Developments in Brooding, they continue through two full days.

Controlling B. W. D. Infection, Dr. Hinshaw, M. A. C.; Insurance, H. S. Russell, Waltham; More Light on Hopper Feeding, J. C. Graham, M. A. C.; Keeping Up to Date on Feeding Problems, A. H. Smith, Yale University; Range Troubles and Control, W. E. Ryan, Jr., Stoughton, Mass.; Developments in Breeding, F. A. Hays, M. A. C.; Selecting Pens for Laying Contests; Shipping Baby Chicks, J. H. Vondell, M. A. C.; and The Egg You Had for Breakfast, J. E. Rice, Cornell University, are some of the subjects and speakers that poultrymen will hear during the program.

Fruit growers start their program Tuesday morning at 9:00, with a

round table discussion on Spraying, Dusting, and Other Pest Control Methods, led by C. H. Gould, Haydonville; G. E. Taylor, Shelburne; H. P. Gilmore, Westboro; and H. M. Rogers, Southington, Conn.

Marketing Cider, C. H. Gould; Crop Prospects for 1928, S. W. Funk, Boyertown, Penn.; National Fruit Problems, R. W. Rees, N. Y. Central Railroad; Rodent Control in Orchards, O. C. Roberts and E. M. Mills, M. A. C., and several orchard trips are scheduled on the program for Tuesday and Wednesday. Tuesday evening the fruitmen will hold their annual dinner, discussing the marketing question from several angles.

LARGE PROGRAM FOR WOMEN

The homemakers will have the largest program of any of the groups which meet during the week, having four full days. What's New in Nutrition, Food Preservation, One Dish Suppers, Vegetables in the Family Diet, Clothing, Home Furnishing, Music in the Home, Literature for Children, Recreation in the Home and Community, and Larger Interests in Home Life, are but a few of the subjects on the program for homemakers and mothers.

Cash crop farmers, home garden enthusiasts, horticultural manufacturers, beekeepers, dairymen, and live stock raisers are all having interesting programs.

Complete programs and information may be obtained from E. S. Carpenter, M. A. C., Amherst, Mass.

Lawn Day, usually held the latter part of June, will be a new feature

of Farm and Home Week, and will be held on Friday, July 27.

The feature speaker of the evening programs will be Liberty Hyde Bailey, Ithaca, N. Y., noted author and lecturer.

Professor Bailey will speak at the general program on Wednesday evening, and has also promised to speak on the home gardening program. His subject for the evening program will be "The Agricultural Background," and for the garden program "The Home Garden."

CO-OPERATIVE SPECIALISTS

TO TALK AT N. E. INSTITUTE

With some of the best known authorities listed on the program, the second annual New England Institute of Co-operation will be held at the Massachusetts Agricultural College, Amherst, Mass., June 26 to 29, inclusive.

The program this year (the first institute having been held last year at Storrs, Conn.) will be built around the general subject, "The Place of Co-operation in New England," according to those in charge of organizing the institute. Dr. Ross, Cornell University, Dr. Black, Harvard University, and several representatives from the United States Department of Agriculture, are already scheduled on the list of speakers.

Details of the program may be had by writing H. B. Rowe, M. A. C., Amherst, Mass.

Essex Farmer and Homemaker

HATHORNE, MASS.

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CALENDAR

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- June 20—Parents' Day at the School.
- June 26-29—New England Institute of Co-operation at Amherst.
- July 22-23—State Wide Field Days of Massachusetts State Grange at M. A. C.
- July 23-27—Agricultural Instructors' Conference at Amherst.
- July 24-27—Farm and Home Week at M. A. C.
- Aug. 8—Field Day and Outing, Chabacco Pomoia Grange, Tuck's Point, Manchester.

IN MEMORIAM

As the school year draws to a close, we are repeatedly reminded of the death of Mrs. Ella S. Morrill, for several years head of the Homemaking Department of this School. Mrs. Morrill was held in high esteem by a large circle of acquaintances, and her work with the students and graduates of this School will long be remembered. She devoted her life to the home and school, and both have lost a true friend.

STATE GRANGE FIELD DAYS AT M. A. C., JULY 22-23

State-wide Field Days of the Massachusetts State Grange will be held on Sunday and Monday, July 22-23. According to W. N. Howard, State Master, these field days are a new feature of the Grange program and are being held at M. A. C. during the Farm and Home Week to promote better co-operation with the College and to enable Grangers to attend both meetings at the same time.



MISS GRACE A. GILKEY

NEW HEAD OF HOMEMAKING DEPARTMENT

The Trustees announce the appointment of a new head of the Homemaking Department, Miss Grace A. Gilkey, of Farmington, Maine.

Miss Gilkey's educational training is high school graduate, graduate of Normal School at Farmington, advanced work at Simmons College, and graduation with degree from Columbia University, New York. She has had a valuable and varied experience in teaching as follows: in schools in Winthrop, Maine; Northampton, Newton, Brockton and Easthampton, Massachusetts. She has also had five years' experience as supervisor of domestic science work in Manchester, New Hampshire.

Miss Gilkey enters the service of the Essex County Agricultural School with interest and enthusiasm and will take up her duties on September 1st.

EINO SORMUNEN ON TRIP TO FINLAND

Monday morning, May 28, Eino Sormunen got up at 5 o'clock as usual and proceeded to do his regular chores, which consist of giving proper care and attention to some 4,000 growing chickens and 1,200 laying hens on his project with Mr. L. D. Foan of Beverly. The next morning, Tuesday, May 29, we find this same student on board one of the biggest trans-Atlantic liners, headed for Finland with his parents.

Eino Sormunen has given a good account of himself for two and one-half months on project, and we are pleased to extend our wishes for a very pleasant and interesting time during the next two months and a half under entirely different environment.

WM. B. MOORE.

SOME PROJECT NEWS ITEMS

Freshman classmates of Jack Ellis of Peabody may be interested to learn that a market-gardening neighbor of Jack's offered to bet him five dollars that he (the neighbor) could beat Jack in raising the earliest yellow sweet corn. Jack is not a "betting man" but has willingly accepted the challenge to show his skill and the race is on. Jack is using the Harris' Extra Early Golden Bantam variety. Cheer for Jack next August on the "home stretch."

Freshman Elbridge Gerry of Lynnfield has studied up on the up-to-date "dope" concerning "mulch paper" gardening. He contemplates using it for growing potatoes, corn and tomatoes on a bothersome piece of witch-grass sod.

Junior student Arthur Gordon of Rowley has thought out the advantages of using overhead irrigation on his strawberries and vegetable crops during the midsummer dry season. He has invested in an "automatic rainmaker" adapted to his water supply and fairly suitable to the size of his project.

Calvin Hardy, Freshman, of Georgetown, had his garden project land plowed and harrowed by a yoke of oxen owned by a neighbor. The job was done in an excellent manner. This is probably the first time in the history of the School that a project seed-bed has been prepared by the use of oxen.

Freshman John Mackenzie of Wakefield has proved that he can use a hoe just as well as he used a hockey-stick on the ice last winter. Most of his project garden is on rather tough sod, but John uses his "Armstrong Hoeing Machine" and is keeping the old sod well tamed.

E. E. METCALF.

READ THIS ON A HOT DAY

"This week the — held their convention and banquet in Pittsfield. We had to fill an order for 1200 Lily cups and 1000 individual boxes of ice cream. The Lily cups are filled with coffee ice cream and covered with whipped cream flavored with vanilla. A whole cherry is next put on which offsets the color and makes a very attractive 'dish.'"

"I put up an ice cream mix for the first time since I've been here." Pasukonis follows with a complete description of his work in the Pittsfield Milk Exchange.

He also finds time to go fishing, and on one recent trip caught fifteen handsome trout. How's that for Peter?

WHO PLANTED FIRST MCINTOSH
IN NEW ENGLAND?

Where is the oldest McIntosh tree in New England? Where is the oldest commercial McIntosh orchard of fifty or more trees in New England?

These and many interesting facts regarding the history of the McIntosh apple in the New England states are being collected, if possible, in a campaign now under way by the Massachusetts Fruit Growers' association.

The McIntosh apple is considered, at least in New England, as the king of apples; and in recognition of this supremacy, the Massachusetts association is heading a movement of New England fruit associations to find the site of the first tree, the first orchard, and other interesting facts. It is planned to suitably mark these first plantings and to prepare and print a history of the McIntosh in New England.

The special committee, composed of Walter E. Piper, state department of markets; Charles H. Gould, president of the association; and W. R. Cole, secretary, are sending out the "Help Wanted" signal. Who set the first McIntosh scion and who set the first McIntosh nursery tree in New England, and any other facts pertaining to the McIntosh history are wanted by the committee.

SUMMER SCHOOL AT M. A. C.

In addition to a list of more than 30 subjects from which to choose, the Summer Session at the Massachusetts Agricultural College, Amherst, offers some special advantages in the line of recreation, such as golf, tennis, hiking, horseback riding, and informal parties. Registration opens on Thursday, July 5, the session extending for six weeks to August 17. Catalogs may be had from R. H. Verbeck, director of the school.

CORN VARIETY TESTS

ESSEX AGRICULTURAL SCHOOL
SEASON 1928

Two pounds each—

1. Longfellow Flint
2. Alford's White Cap
3. King Philip
4. Cornell No. 1
5. Cornell No. 2
6. West Branch Sweepstakes
7. Webber's Early Yellow Dent

These varieties are being carefully tested for the benefit of dairymen of the county.

Another test is being conducted on the farm of James Clark, Andover.

NOTES ON APRIL-MAY WEATHER

	April	May
Max. Temperature	82 (5th)	76 (17th)
Min. Temperature	19 (2nd)	35 (9th)
Ave. Daily Temp.	42.3	52.8
Normal Ave. (Boston)	44.8	57.1
Greatest temp change		
In one day	47 (5th)	35 (17th)
Least temp. change		
In one day	5 (28th)	3 (24th)
Inches of Rainfall	4.84"	2.84"
Normal for month	3.34"	3.18"
(Boston)		
Total for year to date	...	15.02"
(June 1)		
Deficiency for year to date	...	2.53"
Ave. relative humidity	61.7%	69.9%
S. A. M.		
Number clear days	6	6
Partly cloudy days	21	18
Days without sun	3	7
Days on which rain fell	12	14
P. C. sunshine for month	55.6%	49.9%

Many will be surprised to find the rainfall for May below normal, in view of the protracted wet weather the latter part of the month, but the month of May as a whole, aside from being somewhat cooler than normal, had no unusual features. Although there was less than 50% sunshine, May 1927 produced only 38%.

April was neither as warm nor as sunny as a year ago, and was much wetter; there being less than 1.5 inches of rain in April, 1927.

The cool weather and decreased amount of sunshine as compared with last year has retarded crops markedly. The dull weather during blossom time will probably decrease the set of fruits, because conditions were so unfavorable for bee action.

It has been an ideal spring for apple-scab development, the spores reopened early and it has been difficult to keep new foliage properly sprayed since their maturing.

H. A. MOSTROM.

Professor William R. Cole will give a lecture-demonstration in food preservation at the Young Men's Temperance Hall, South Groveland, on Friday, June 15, and at the Grand Army Hall, Essex, on Friday, June 22. These demonstrations begin at 2.00 p. m. Everybody welcome.

The personnel of the force on the School Poultry Plant this summer consists of William Wilson as foreman. His first assistant is George Strobel, and the one hired man who claims to get the bulk of the dirty work is Aarne Kolhonen. This healthy, happy, hard-working crew are proud of their more than 5,000 chickens and have to sit up late nights candling the eggs laid by the laying hens every day.

WM. B. MOORE.

ON TO CAMP GILBERT

At this season of the year the question on the lips of every Essex County Club member is: "Who is going to Camp Gilbert?" That is quite a question for the Club Agent to answer.

However, I can say this: Those who do go to Camp Gilbert are the outstanding boys and girls in the various clubs of Essex County.

Every year Essex County has the privilege of sending seven boys and girls to this Camp. Last year, for the first time, we sent, with these Club members, three Local Leaders, and this year we are planning to send four other Local Leaders.

Camp Gilbert is held the last week of July at the Massachusetts Agricultural College in Amherst. Our motto is, "Hop to it..." and the Campers certainly do. To date the following have been selected to attend the camp this July: Annie Boush, North Andover, Canning Champion, and Haig Depoian, Garden Champion. These two were selected for the work they accomplished in their Clubs in 1927.

ROBERT B. EWING.

NOW WORKING FOR GRADUATES

There are at least eight students now on project for the summer who are employed by graduates of this School. That this is as it should be goes without saying. We are glad that it is a fact, and hope that as our graduates get even more firmly established in business they will continue to employ Essex Aggie students for the summer. There are also several instances where old graduates are employing young graduates.

Student	Employer
Andrew Baillie	James L. Rogers, '21 Winthrop, Me.
Ernest Blaney	Howard C. Robidou (Grad. Evening Poultry Class '27) Lynnfield Center
Roland Daggett	Joseph Parisi, '26 Foreman at Swinson Bros. Gloucester
Clifford Bryer	Bradford Burnham '16, Essex
Stanley Emerson	Melville Grey, '16 Wenham
Hector Gilman	Horace Shute, '27 West Newbury
Paul Hsley	Elden L. Holt (Grad. evening poultry class '27) Salisbury
Richard Saunders	Maynard Tucker '20, Gloucester

BETTER HOMES DAY, JUNE 13

EXTENSION WOMEN HEAR MARGARET SLATTERY

Extension women and their friends attended the fifth Better Homes Day held at Essex Aggie on June 13. It was a fine showing of the interest which women of Essex County have in Extension Work and Homemaking. The play given by West Boxford women assisted by 4-H Club members was a great success. The demonstrations showing features of the projects conducted by the Extension Department proved most attractive. Twenty-one county women participated in these demonstrations.

The musical numbers were a good introduction to the afternoon program. Miss Margaret Slattery was at her best, and we feel sure that parents found in Miss Slattery's address a good deal of food for thought and must have gone from the meeting with a new attitude toward their children. She paid a high tribute to fathers and mothers who have succeeded in making a true home and developing character in their children. The address, which proved most interesting and inspiring, was received with great enthusiasm.

ANNUAL MEETING OF EXTENSION WOMEN

The fifth annual business meeting of the women's section of the Extension Department was held at Essex Aggie on May 22. More women registered than at any previous annual meeting. Seventy-five (75) women attended, representing twenty-six (26) communities. These women co-operate with the Home Demonstration Agent in organizing Extension projects throughout the county. Annual reports were given by county women in nutrition, clothing, home management and home nursing projects. It was reported that six hundred and ninety-four (694) women in thirty-three (33) communities carried these projects during the year under the Extension Department.

Miss Marion Parker of Beverly, chairman of the newly organized Extension Committee, presided. Mrs. Annette T. Herr, Mrs. Harriet J. Haynes, Miss May Foley and Miss Esther Cooley from Massachusetts Agricultural College, and Miss Caroline Wilson from the State Department of Education were present; also Miss Regina Feeney, Home Demonstration Agent of Middlesex County. Mrs. Walter Currier of Middlesex County gave an interesting account of "What It Means to be a Project Leader."



MISS MARGARET SLATTERY

BETTER HOMES IN
AMERICA WEEK

ESSEX COUNTY TOWNS CO-OPERATE

Several towns in Essex County co-operated with the Better Homes in America movement, of which Mr. Herbert Hoover is President and Mrs. James J. Storrow, State Chairman. At a meeting held at the Copley-Plaza on May 24th, chairmen made reports of work accomplished. The following towns have sent reports to the Home Demonstration Agent: Groveland, Beverly, Cliftondale and Peabody.

Groveland conducted a Demonstration Home, which was visited by 2500 people. It was a fine community enterprise from the dedicatory services on Sunday to the lectures and demonstrations held throughout the week. A most attractive house, loaned by Mr. Albert Amazeen, was furnished by Haverhill and Groveland merchants. Lectures and demonstrations were given by local and county people, nearly every town organization co-operating with much enthusiasm. The work was organized by Mrs. George Mitchell, Mrs. Albert Amazeen and Mrs. Gardner Wood.

Beverly also conducted a Demonstration Home, which was visited by 534 people. This was furnished by Beverly merchants. Demonstrations were given by Girl Scouts and 4-H Club members. Many agencies co-operated with the movement, among them the Beverly Health Center, Y. M. C. A., School and Health Departments, Women's Club, Library, and Chamber of Commerce. Groups of women studying Kitchen Improvement with the County Extension Department conducted a Kitchen Tour

HOMEMAKING DEPARTMENT
NOTES

Let us remind you that our annual Parents' Day will be on Wednesday, June 20th.

WINS VALUABLE SCHOLARSHIP

Ruth Graves of Salem, a member of this year's High School Special Class, has been awarded a scholarship for excellency in Home Economics work. The scholarship was made possible by the Board of Directors of the Mack Industrial School, and is awarded to the Salem High School student who has shown marked ability in Household Art subjects.

Miss Graves was graduated from the Salem High School a year ago. She has done splendid work as a student in the Homemaking Department and we are happy to announce that she is an accepted student at Boston School of Domestic Science for the coming year.

SEWING CLASSES

We find that the girls in the sewing classes have made since last September the following articles of clothing:

246 dresses, 11 coats, 4 suits, 73 children's dresses, 40 baby dresses, 37 romper sets, 223 hats, 279 pieces of underwear, 37 kimonos, 37 pillowcases, 150 aprons, 78 Christmas articles, 75 pajamas, 109 articles of renovation, 27 baby night-dresses, and 251 patches.

RUTH ERICKSON.

and scored the kitchen in the Demonstration House. Miss Marion Parker acted as chairman.

Peabody co-operated with the Strand Theatre in showing a health film. A "clean-up week" was conducted with the co-operation of the Fire Department. The Public Library displayed material giving suggestions for home conveniences, gardens and health. Mrs. Adin French and Mrs. E. H. Fogg acted as chairmen.

The Better Homes Committee of Cliftondale started their campaign Sunday morning, when all the ministers in the town preached on "Relations in the Home." The merchants in the town had window displays all the week. There was a shelf of books on homemaking, etc., in the library. On Thursday afternoon a tour of the town was held. Two houses which had been remodeled and had labor-saving devices, and four new houses were visited. On three different days groups of women were taken to the Priscilla Proving Plant.

MARION CRAWFORD,
Home Demonstration Agent.

ESSEX FARMER AND HOMEMAKER

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VOL. 9

HATHORNE, MASS., JULY, 1928.

NO. 7

L. H. BAILEY, AUTHOR, EDITOR,
AND NOTED AGRICULTURAL
EDUCATOR

Liberty Hyde Bailey, educator, author and editor, was born at South Haven, Michigan, in 1858. His early experiences were bound up with the ruling interests of his later life, for he was reared on a farm and was graduated from the Michigan Agricultural College in 1882. The following year he married, and obtained his Master of Science degree in 1886.

It was at Michigan Agricultural College also that Professor Bailey began his university career as a teacher, for his first post was as professor of horticulture and landscape gardening at his alma mater. In 1888 he first went to Cornell, and there in 1903 he began the period of his directorship of the New York State College of Agriculture. He held this post for ten years, until his retirement in 1913.

During his career Professor Bailey won many honors. He was made a fellow of the American Academy of Agricultural Science, is a member of the American Philosophical Society and of the National Academy of Sciences, and an honorary member of the horticultural societies of England, Norway and Japan.

No less than forty-three compilations, writings, and text-books have issued from Professor Bailey's pen. His works include widely read and justly popular books on country life, books of reference, and educational text-books. His first book, the *Annals of Horticulture*, was published in 1889, and he is still writing and publishing. His latest work is *The Harvest*, published in 1927. Among his best known are *The Holy Earth* (1915); *Wind and Weather*, a book of verse published in 1916; *Universal Service and What Is Democracy?* (1918); *The Apple Tree* (1922); *The Gardener* (1925), and *The Seven Stars* (1923). His earlier works were of a more technical character, and include: *Principles of Fruit Growing and Principles of Agriculture*; *Evolution of Our Native Fruits*; *Principles of Vegetable Gardening*; *The Nature Study Idea*; *The State and the Farmers*; *The Training of Farmers*; *Rus*, a biographical register of rural leadership; and numerous text-books of botany.



PROFESSOR L. H. BAILEY

As an editor, Professor Bailey is also renowned. He was the first editor of *Country Life in America*, from 1901 to 1903; and editor of *The American Garden*. In addition, he edited three *Cyclopedias*, and the *Rural Science and Open Country* series of text-books and manuals.

The honorary degrees of LL.D. from the University of Wisconsin, LL.D. from Alfred University, and Litt.D. from the University of Vermont, have been conferred on Professor Bailey.

NOTE.—This article and half-tone cut were sent from the New York State College of Agriculture.

FAIRS

Topsfield, September 12-15.
Springfield, September 16-22.
Worcester, September 25-29.
Brackton, October 1-6.

"For an investigator we want a man or a woman who is freeminded and who searches without making promises. For a public officer we want a person who thinks as we do; this is what political parties mean."
—Liberty Hyde Bailey.

FARM AND HOME WEEK AT M. A. C.
JULY 24-27

Farm and Home Week at the Massachusetts Agricultural College, July 24, 25, 26 and 27, is one time when farmers and homemakers become "students" again and enter the class room to hear discussions on modern ideas of agricultural pursuits and of making the home a better place in which to live.

This year one of the special features during the program is a unique pulling contest of groups of men against the dynamometer, which is ordinarily used in testing the pulling power of horses. Fruitmen, poultrymen, beekeepers, dairymen, and others will enter their groups (20 in a group) in this contest, which will be held on both Tuesday and Thursday afternoon, the live stock parade being held on Wednesday afternoon. Arrangements are also being made for other special contests, or attractions to add to the recreational side of the program.

EVENING PROGRAMS

The evening programs also have much to offer to the visitors in the way of entertainment. On Wednesday evening the men and homemakers will be taken on "The March of the Seasons Through the White Mountains of New Hampshire," with Albert Leonard Squier, noted artist and lecturer, who illustrates his talk with scenic views of the countries through which he takes the audience. The same evening, Roy K. Patch, well known Massachusetts tenor, will give several selections.

Thursday evening's program will have two speakers. M. Elwood Smith, Oregon State College has selected as his subject, "When You Read a Poem." People in Massachusetts who have heard Dr. Smith's lecture, recommend it very highly. "Community Recreation," will be the subject of the other talk during the evening, by Mrs. M. Q. Lott, recreational director of the city of Minneapolis, Minn.

Another special feature of Farm and Home Week this year will be the State Grange outing, which will be held Saturday, Sunday and Monday preceding Farm and Home Week.

Complete programs and reservations for rooms, etc., may be had by writing to E. S. Carpenter, Extension Service, M. A. C., Amherst, Mass.

Essex Farmer and Homemaker

HATHORNE, MASS.

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CALENDAR

- July 17—Essex County Poultry Tour to Norfolk County.
- July 21-23—State Grange Outing at M. A. C.
- July 23-27—Agricultural Instructors' Conference at M. A. C.
- July 24-28—Farmers' and Homemakers' Week at M. A. C.
- July 25—Essex and Middlesex North Pomona Field Day, at Amesbury Park, Amesbury.
- August 1—Field Day at Market Garden Field Station, Waltham.
- August 8—Chebacco Pomona Field Day, Tuck's Point, W. Manchester.
- August 9—Essex County Dairymen's Picnic at Topsfield.
- August 11—Eastern Mass. Society of Beekeepers' Field Day, at School.
- September 4—Opening Day for new students in both departments.
- September 5—Opening Day for advanced students in Homemaking Department.
- October 1—Opening Day for advanced students in Agricultural Department.
- November 27—Graduation Day for Class of 1928.

FARM SHOP SUMMARY SHOWS THE AMOUNT AND VALUE OF WORK DURING THE PAST YEAR

During the past winter the Farm Shop has been a busy place under Instructor Hardy, who has kept a complete record of articles constructed and repair jobs done. The list shows that every division of the school has called upon the Farm Shop for work of one kind and another. The list covers a wide range of articles, from 7,000 small wooden tags used in labelling plants, to 11 wheelbarrows, 26 step-ladders, and 11 bee hives.

A total of 980 separate articles

were constructed and distributed as follows: Agricultural Department 31; Homemaking 109; Dairy and Farm 31; Poultry 207; Ornamental and Greenhouse 327 (7,000 labels); Fruit 35; Beekeeping 16; Shop 46; for students 114; miscellaneous 64. Total, 980.

The summary also shows 249 different jobs, valued at \$833.95, done during the past year. The repair work on farm wagons and implements numbered 26 and was valued at \$74.75. Seventy-five dollars was paid by students for material used in construction of articles for home use.

Practically all of the work was done by the students themselves, who undoubtedly derived much benefit from the diversity of the work. The above summaries do not list the outside construction work, such as the addition to the permanent brooder house, house and frames for Japanese pagent, and construction of concrete forms for horse-barn.

To further illustrate the practicalness of the work and the value of the farm shop to other divisions of the farm, we append the list of articles constructed for the poultry department; number in parenthesis indicates the number of articles constructed:

Chicken feed hoppers (32), new screen frames (15), nest gates (14), hopper bars (14), forms for poultry house (11), screen frames repaired (7), candling boxes (2), poultry catchers (30), partition feed hoppers (2), gates (1), small gate (1), sorting crates (3), broody crop frames (7), chicken protectors (2), refitting hoe handle, poultry handle on cleaver, crate for model poultry house, and repairing cover pipe.

MARRIAGES.

Mr. Andrew W. Love, a former instructor at this school and now at the Norfolk County Agricultural School, was married to Helen Elizabeth Symmes on Wednesday, July 11, at the Immanuel Congregational Church, Beverly.

The marriage of Miss Ruth S. Erickson to Mr. Gustaf H. Erickson is announced to take place on Wednesday, August 1, at 21 Cherry Street, Danvers.

Keep the surface of the rose beds loose during the summer, to retain moisture in the soil.

Says Sam: "When the meek have inherited the earth, the go-getters will talk them out of it."

SCHOOL NOTES

Instructors C. M. Stearns, G. A. Meigs and County Agent Smith attended the New England Institute of Co-operation at Amherst, June 26-29 inclusive. Instructor Stearns spoke on the Massachusetts Roadside Stand Association.

Camp Counsellor Alton Perkins of Lynn decorated the School truck and entered the 200th Anniversary parade of the Town of Middleton. Farming implements of "ye olden time" occupied part of the float, with George Fuller, Essex Aggie junior, in charge. The other part of the float was fitted up as a farm kitchen of the olden days, with Carolyn Wilkins of Middleton, sitting at the flax wheel.

Of the 124 students now on projects from this School, all but sixteen are located in Essex County. Of this number, 12 have found employment in nearby counties in Massachusetts, while only four have sought employment outside of the State. These four students are

Andrew Baillie, Lakeside Farm, Winthrop, Maine.

George Day, Lane Road, Raymond, N. H.

Irving Jaquith, 409 Seventh St., Riverton, N. J. (Employed at H. A. Dreer's Nursery.)

Charles Marston, Pomfret Center, Conn., c/o Mrs. R. M. Clark.

ENGLISH MEDALS

Abraham Krasker, a former instructor at the School, has selected two beautiful medals which will be presented to the two seniors, one from each department of the School, for the most outstanding accomplishments in Oral and Written English. Mr. Krasker's object in awarding the medals is to stimulate interest in all phases of English work. Realizing the value of a good command of the mother tongue, Mr. Krasker hopes to create a renewed interest in the study of English at this school.

For the past few years the Alumni Association has awarded five dollar gold pieces to the senior in each department of the school who has shown the most progress in Academic work during the entire course. The Krasker English Medals and the Alumni Prizes are the only awards made in recognition of academic work.

The entire staff of the Agricultural Department will be in attendance at the Annual Summer Conference of the Massachusetts Agricultural Teachers' Association, held at Massachusetts Agricultural College during Farm and Home Week.

TIMELY TIPS FOR FRUIT GROWERS

By PROF. W. H. THIES.

Every Acre at Its Best.

Growers in the Northwest claim they lose \$150 for each acre of apple orchard that fails to bear more than 200 bushels. But if the yield is 1,000 bushels an acre they make a good living. Blank spaces and weak trees mean wasted energy and smaller profits.

Where Honor is Due.

A memorial to the first Jonathan apple tree has been established at Woodstock, N. Y. Surely the McIntosh deserves equal recognition. An effort is being made to determine the location of the first McIntosh tree in Massachusetts. Any clue regarding pioneer plantings should be reported to Mr. W. E. Piper, Division of Markets, State House, Boston.

Eliminate the Unfit.

Nearly every bearing tree sets more fruit than it should. Often two or three apples are carried through to maturity where there is room for only one. It costs more to pick a bushel of small apples than it does a bushel of large ones and the small ones sell for less. In other words, thinning doesn't cost anything extra because the fruit must be harvested anyhow, and the resulting product sells for more. Figure it out.

A Tip from Nature.

Ever try storing apples like potatoes, in a pit in the ground? Russets thus stored develop a crispness of flavor seldom approached in common storage. No traces of shrivelling there. Proper moisture conditions plus low temperature are responsible. *Those Wrinkled Leaves.*

Early leaves, particularly on Baldwins, show considerable distortion and wrinkling this season. There is good evidence that the unseasonably cold weather during April is to blame.

ALFALFA DEMONSTRATIONS

In order to determine the value of different methods, a demonstration has been started at the Topsfield Fair Grounds, just back of the office of the Co-operative Farming Association. Northern grown, common seed is being compared with Grimm. No lime, 2 tons, 4 tons, and 6 tons are compared. The whole plot was manured and plowed and half the lime was put on last fall. This spring the rest of the lime was applied. The first seeding was made June 23rd, after a rain. The field was in a very poor

sod. This plot was disk-harrowed thoroughly, then spike-toothed into proper condition. All except a small portion of seed was inoculated with certigermin. At time of seeding 400 lbs. of an 8-8-6 fertilizer was applied, and also 250 lbs. of potash, except a small strip with no potash.

There will be a plot seeded in July and another in August to compare with the June seeding. Each seeding comprises one-twentieth of an acre. This plot is largely an attempt to let nature advise the preferable practices.

Other test plots, of one acre each, are on the farms of Louis Bourdelais, Andover; W. D. Bragdon, Methuen; and Fred Miller, Methuen. It will be worth while to watch these tests.

F. C. SMITH.

VEGETABLE GROWERS ATTENTION

IS IT ALL BUNK? WHAT? EXHIBITING!

Why do gardeners exhibit products of their hard labor at a Fair?

1. Some believe the whole thing is "bunk."

2. Some take honest pride in displaying the best results of their knowledge and skill as gardeners and showmen.

3. Some get a great "kick" out of the competitive contest atmosphere at a show where prizes are offered.

4. Some believe a vegetable show offers a fine chance for vegetable growers to advertise their industry and products to thousands of consumers, thus stimulating consumption and proving of general benefit to all.

If your sentiments agree with those in either group 2, 3 or 4, make the resolve *now* to spare time enough from regular work next September to select and enter something in the Fair Exhibit that will be a credit to you and the industry.

Enter into the spirit of sportsmanship for a time, after the summer's hard work, and "show the world" how well you know true types, uniformity, table quality and "class" of your favorite products.

Topsfield Fair, "accredited with being one of the three fastest growing Fairs in the United States," offers an opportunity.

It takes knowledge and skill.

Start planning NOW.

ELLERY E. METCALE.

DAIRYMEN'S PICNIC, AUGUST 9TH

The dairymen of Essex and Middlesex counties are uniting to hold a joint picnic and field day at the Topsfield Fair Grounds, Thursday, August 9th. Dairymen everywhere will bring their basket lunches to meet at noon. A caterer will serve ice cream, soft drinks, coffee, sandwiches, etc.

The program begins at 12.30 with an address by the new director of the Bureau of Animal Industry, Evan F. Richardson. He is well known among grangers of the state. He is a dairyman, himself, and will have a message all will want to hear.

Another speaker and entertainer will furnish amusement for all. Later J. C. Cort, of the Department of Agriculture, will speak on the program of the State Dairymen's Association and explain the value of membership therein.

One of the most interesting stunts will be a Tug-o-war between dairymen of Essex County and dairymen from Middlesex County.

The officers of the State Dairymen's Association, the Essex County Tested Herd Improvement Association, and the Tested Herd Owners Association of Essex and Middlesex Counties are combining to make this meeting a success, rain or shine.

F. C. SMITH.

DIAGNOSTIC SERVICE RENEWED

The Department of Veterinary Science of the Massachusetts Agricultural College, Amherst, Mass., announces that those who desire diagnosis of poultry diseases will be resumed July 1, 1928. The fee charged is \$2.00. Check or money order payable to the Treasurer of the Massachusetts Agricultural College should be enclosed in a letter giving the following information

1. Where chicks or fowls were purchased.
2. Age.
3. Suspected causes of trouble.
4. When signs of disease first appeared.
5. Number in flock exposed.
6. Number affected.
7. Nature of corrective remedies used.

All dead specimens should be well cooled promptly after death, then packed in air-tight, preferably tin containers, and well wrapped in paper. Send either by parcel post or express prepaid Mark it PERISHABLE. Avoid shipping Friday or Saturday.

One shipment consists of not more than five chickens or two adult birds from the same farm. Fee is based on this.

4-H CLUB LEADERS AND CHAMPIONS TO ATTEND CAMP GILBERT

Camp Gilbert is attended by all the County Champions in Massachusetts, and then along with these Champions each County sends two or three Local Leaders.

Last year was the first year that Local Leaders were permitted to attend the Camp, and the three in the picture are from this county. They are, left to right:

Miss Myra Smith, Methuen, who has been general supervisor of all 4-H Club work at the Marsh Corner School for six years. This past winter she had six Junior Leaders, one for each of her clubs, namely, three Clothing, Lunch Box, Handicraft, and Poultry.

Mr. Silas Little, Newbury, has been leader of the Wessacuccon Dairy Club of Newbury for two years, and is one of the four adult leaders who supervise club work in Newbury.

Mrs. Leon Jordan, Groveland, is leader of two Clothing Clubs, and has been in club work for three years.

The following leaders will attend Camp Gilbert for the first time this year:

Mr. Milton Howard, a leader of the Forestry and Poultry Clubs in Rowley, has been a leader for four years.

Mrs. Agnes Noyes, Newbury, supervisor of all Club Work in Byfield, has seven clubs at her school: sewing, food, poultry, forestry, handicraft, canning, and garden. Mrs. Noyes has led a Club for seven years.

Miss Harriet Smith, Newbury, who has led the Newbury Poultry and Garden Clubs for two years, is one of the four adult leaders who supervise club work in Newbury.

Miss Catherine McInnes, West Boxford, has led a Clothing Club in West Boxford for the past three years.

4-H CLUB CHAMPIONS, 1927-1928

The following boys and girls are the Champions for Essex County who will attend Camp Gilbert.

Garden—Haig Depoian, Methuen, has been a club member for five years. His three-acre market garden last year won him a trip to Amherst.

Canning—Annie Boush, North Andover, a club member for five years, canned over 300 two-quart jars of vegetables and fruits last year, and is also going to Camp Gilbert as a reward for excellent work.

Forestry—Alfred Taylor, Methuen, is the first Forestry Champion in Essex County. He planted over 300 trees this year and cleaned up a half-acre of woodland to set trees in.



4-H CLUB LEADERS WHO ATTENDED CAMP GILBERT LAST YEAR.

Poultry—Gertrude Colby, Newbury, has been in Club Work two years. She raised over 300 chicks this year. Miss Colby joined five clubs two years ago and has completed work in every one.

Clothing—Valeria Loches, Methuen, has been in Club Work three years. She led a Club of first-year members last winter.

Food—Charlotte Scott, Beverly, has been in club work for four years. She assisted her local leader and prepared 176 meals during the past year.

Dairying—Justin P. Little, Newbury, a member of the Dairy Club for three years, also a member of the Garden, Poultry, and Forestry Clubs. He has kept the record of a heifer and a milch cow for the past year.

ALUMNI NOTES

Fred Bragdon, '27, is a sub-foreman on Bradford Burnham's Ornamental Nursery. Mr. Burnham is a member of the 1916 class.

Erwin Dodge, '27, has accepted a position with the Pittsfield Milk Exchange, Pittsfield, Mass. Peter Pasukonis is also working there.

Henry Ellis, '27, is manager of a creamery of the New York Co-operative Dairymen's League, located in Utica, New York.

Among our recent visitors was Kenneth C. Furbush, who attended the School with the 1918 students. Mr. Furbush is now working with the North Shore Landscape Service, with headquarters at 217 Euclid avenue, East Lynn, Mass.

NUTRITION QUERIES ANSWERED

By MAY E. FOLEY,
State Nutrition Specialist.

Ques. "May beet tops and chard be substituted for spinach?"

Ans. "At this time of the year, beet tops, chard, or any other leafy vegetables may be used in place of spinach. Though no one food ever exactly takes the place of another, it is well to know which ones have the same general composition. If we remember to serve a leafy vegetable, or one that is green in color, every day, we will not go far wrong."

Ques. "Should berries be given to young children?"

Ans. "Berries should be given to young children only if cooked and strained. The seeds may be very irritating to the sensitive digestive tract of the child."

Ques. "Does the child need cod liver oil in the summer?"

Ans. "The average child does not need cod liver oil in the summer when nature provides plenty of sunshine. But the child must be out in the sunshine if he is to get the benefit of it. Sunshine through window panes is not nearly as beneficial as direct rays."

Ques. "Is there any good effect from letting sliced cucumbers stand in salt before they are eaten?"

Ans. "No. There was an old notion that salt sprinkled on the cucumbers drew out the poison. Now we know that letting them stand in salt only makes them briny and less attractive. We serve them as cold and crisp as possible. Cucumbers are not easily digested by young children, and some adults find them distressing."

CORN VARIETY TEST

The Extension Service of the Essex County Agricultural School has planned a variety test on the School farm in an attempt to determine the comparative value and yielding qualities of the different varieties sold or recommended for silage in this county. These were planted June 14th, using a two-row planter, six cords of manure and 300 pounds of a 4-8-4 fertilizer per acre.

The plot starts on the side next the hill orchard, 1923 planting. The first four rows are Commercial Sweepstakes, then follow, Alvard's White Cap Dent, West Branch Sweepstakes, Cornell No. 12, Cornell No. 11, Certified Cornell No. 11, King Philip, Weber's Early Dent, Lancaster Sure Crop, and Improved Leaming.

ESSEX FARMER AND HOMEMAKER

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HATHORNE, MASS., AUGUST, 1928

NO. 8

WHAT THEY DO AT CAMP GILBERT

BY A 4-H CLUB CHAMPION

If you want to know what a real Camp is, just ask one of the boys or girls in the above picture. They have just returned from spending one week at Camp Gilbert.

This Camp, as you probably know, is composed of State and County 4-H Club Champions and Local Leaders. The boys and girls in the above picture are the Essex County Champions.

What did they do at Camp? Read what one of the girls said about life at Camp Gilbert.

"We had to get up at six o'clock and be at the dining hall at seven, where Mr. Ewing made us go through setting-up exercises. Then we had breakfast. After breakfast, I attended a meeting that was in charge of a Mr. Bradford, Playground and Recreation Association of America, who showed us how to make use of the recreational part of the 4-H Club program, and believe me when we were through with some of the games he played, we were ready for rest, but "no such luck." Some demonstration was then in order, such as a food demonstration, or a talk on shoes, hosiery or care of the feet, or on birds or flowers. Then we were ready for dinner. From one to two another rest period, and then from two to three we had talks on Music Appreciation by Miss Fannie Buchanan, who wrote "Dreaming" and "The Plowing Song." After that we had one hour with Mr. Bradford, and I never learned so many games as I did when I attended his meetings. From four to six special groups held their meetings. Both boys and girls were divided into four groups for a Song Contest, which was held on Wednesday evening. These groups, practiced their songs from four to six.

After supper we usually had a Campfire, which brought to an end the day's program.

I can never forget the last night at Camp and the 4-H Candle Lighting Service, and I don't believe that anyone who has attended one of these services will ever forget Mr. Farley or the song that we sang as we stood with our lighted candles facing the world."



4-H CHAMPIONS AT CAMP GILBERT, WITH COUNTY AGENT EWING
Front Row, left to right—Justin Little, R. B. Ewing, Alfred Taylor. Back Row, left to right—Gertrude Colby, Charlotte Scott, Valeria Loches, Annie Boush.

FOLLOW THE GLEAM.

To knights in the days of old

Keeping vigil on mountain height,
Came a vision of Holy Grail

And a voice through the waiting
night:

Follow, follow, follow the gleam!
Banners unfurled o'er the world.

Follow, follow, follow the gleam
Of the Chalice that is the Grail.

And we who would serve the King,
And loyally Him obey,

In the consecrate silence know
That the challenge still sounds to-day:

Follow, follow, follow the gleam!
Standards of worth o'er all the
earth.

Follow, follow, follow the gleam
Of the light that shall bring the
dawn.

FOOTBALL SCHEDULE, 1928.

Oct. 5	Peabody
Oct. 12	Swampscott
Oct. 20	Manchester
Oct. 27	Wilmington
Nov. 3	Saugus
Nov. 10	Stoneham
Nov. 17	Salem, N. H.
Nov. 24	Gloucester
Nov. 29 (Thanksgiving Day)	Danvers

WALLACE S. MORELAND, ESSEX AGGIE 1920, NOW ON STAFF OF NEW JERSEY COLLEGE OF AGRICULTURE

The resignation of Wallace S. Moreland as a member of the faculty of Connecticut Agricultural College is of interest, as Mr. Moreland is a native of Salem. He has been instructor in poultry husbandry at the College at Storrs, Connecticut, and resigns to accept a position with the editorial department of the extension service in the New Jersey College of Agriculture, at Brunswick, N. J.

Mr. Moreland is the son of Mrs. Lucy Moreland, formerly of Salem, now of Cambridge, and is a brother of Philip Moreland of Fairmount Street, Salem, and Mrs. Paul Moore of Danvers. He is a graduate of the Pickering School, Salem, and of the Essex County Agricultural School. He went to the Connecticut Agricultural College and graduated in the Class of 1926.

His new duties at the New Jersey College will be mainly the preparation of reports on agricultural developments and experiments carried on at the College, for publication in the newspapers of New Jersey, Philadelphia and New York. During his four years at Storrs, Moreland was the College correspondent for the Hartford Courant.

Essex Farmer and Homemaker

HATHORNE, MASS.

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CALENDAR

- September 4—Opening Day for new students in both departments.
September 5—Opening Day for advanced students in Homemaking Department.
October 1—Opening Day for advanced students in Agricultural Department.
November 27—Graduation Day for Class of 1923.

GROVELAND WINS HONORABLE MENTION IN BETTER HOMES CAMPAIGN

Groveland was deemed worthy of Honorable Mention by the Committee on Awards in the National Better Homes Campaign, conducted during the last week in April. This is indeed an honor as 5,048 communities participated in the campaign. Groveland was one of the six towns in Massachusetts to be given honorable mention. This was given for "Complete community co-operation and participation in Demonstration House." The campaign was conducted by Mrs. George Mitchell, Mrs. Gardner Wood, and Mrs. A. H. Amazeen.

EASTERN MASSACHUSETTS SOCIETY OF BEEKEEPERS HOLDS MEETING AT HATHORNE

The twenty-second annual field day of the Eastern Massachusetts Society of Beekeepers was held at the School on Saturday, August 11. This society was organized in 1906 under the auspices of the Massachusetts Department of Agriculture. George A. Meigs of the School staff is President of the Society, and is also acting Secretary, Thomas J. Hawkins of Everett having resigned this office.

SCHOOL NOTES

Instructor Philip H. Conhig has returned to his duties as Director of Physical Education, after attending the summer session at the University of Illinois.

Instructor Henry P. Thurlow has returned from a two weeks period of training in the officers school at Fort Williams, Portland Maine. Mr. Thurlow is a captain in the 388th Infantry, U. S. A.

Frank L. Edwards, M. A. C., 1908, has been appointed to fill the vacancy in the poultry division occasioned by the resignation of Albert W. Doolittle. Mr. Edwards comes from Hartford, Connecticut, where he was formerly principal of the Watkinson Farm School.

Instructor H. A. Mostrom has returned to his duties as Educational Manager, after spending two weeks in Amherst.

Miss Ruth Erickson, acting head of the Homemaking Department, was married on Wednesday, August 1st, to Mr. Gustaf Erickson of Chester St., Danvers. The ceremony was at seven o'clock, with the Rev. Dr. Shepler of Salem officiating. Many graduates and friends of the school were present. The bride and groom left on a ten-day trip, and on their return will reside on Chester Street, Danvers.

MASSACHUSETTS AGRICULTURAL FAIRS ASSOCIATION PRIZE ESSAY CONTEST—1923

The Massachusetts Agricultural Fairs Association, desiring to extend its educational program, has inaugurated an essay contest for the purpose of interesting young people who attend high and vocational schools in the educational advantages of agricultural fairs. The Massachusetts Agricultural Fairs Association has a membership of 27 of the larger fairs in Massachusetts. It has for its purposes the stimulation of a greater interest in the agricultural, industrial, educational and recreational possibilities of the Commonwealth. Believing that these purposes coincide with the objects of the public school system, the Association feels that these two agencies can co-ordinate their interests and that the essay contest offers an effective method of securing a wider appeal to this program. Fifty dollars in prizes is offered, to be divided as follows: First prize, \$20.00; second prize, \$15.00; third prize, \$10.00; fourth prize, \$5.00, for the best 1,000 to 1,500 word essay on "What I Learned at an Agricultural Fair."

RULES AND REGULATIONS

1. This contest is open to all students regularly matriculated in a senior high school or vocational school of high school grade in a two to four year course.
 2. All essays must be typewritten on white paper, standard size sheet—8½x11 inches.
 3. Typewriting may or may not be done by contestant.
 4. Sheets shall be written on one side only.
 5. Essay must be based on observation at an agricultural fair in 1923.
 6. Essays must be original and the contestant's own work.
 7. The name and address of the contestant must appear in the upper right-hand corner of title sheet and the name of the school in the upper left-hand corner of same.
 8. The principal of the school is requested to make a signed statement on the last page of each essay, that to the best of his knowledge and belief, the work is the contestant's own composition.
- For further information, address all inquiries to A. W. Lombard, Secretary, 136 State House, Boston, Mass.

BAILEY'S BOOK TREATS FARM RELIEF

"The Harvest," by L. H. Bailey, is a book of pertinent and reasoned observations on one of society's most pressing problems. Society's good demands that capable persons on good farms must be saved as farmers. This book represents the mature judgments of a great thinker on those questions of public concern which now occupy the mind of every intelligent citizen.

The book offers no formula for farm relief, but presents the situation with clarity and understanding. The author outlines some present conditions which must be remedied. He comments on such questions of public interest as land utilization, the decreasing farm population, corporation farming, co-operative marketing, public regulation of production and food prices, the surplus, taxation, and rural uplift and organization. His conclusions are stimulating and thought-provoking. To further understanding, which is the real meat of the problem, he describes some of the rewards which now keep good farmers on the land. (Publishers, The Macmillan Company, New York.)

TOPSFIELD FAIR
TOPS THEM ALL
SEPT. 12 - 15, Inc.

ESSEX COUNTY POULTRYMEN CONDUCT SUCCESSFUL TOUR

VISIT PLANTS IN NORFOLK AND MIDDLESEX COUNTIES

Tuesday, July 17, proved to be a red letter day for those interested in poultry in Essex County, who took the day off and went on the poultry tour over into Middlesex and Norfolk counties. The day was fair and exceedingly warm. There were 32 machines and 126 people, a mighty good showing and very pleasing to those responsible for the tour.

A total of six stops were made during the day, and at each stop some particular new development in the poultry industry was observed being put to practical use. Many labor-saving devices and the use of a furnace to control moisture and provide circulation in a three-decked made-over barn interested many at Mr. Sarano's in Lexington. Sixteen thousand young turkeys twelve weeks of age that had never been off wire platforms interested many of the Essex County poultrymen. The mortality rate in these poultts up to that time was less than 5 per cent. Those interested in trap-nesting and pedigree work saw a breeding plant operated entirely by the trap nest and pedigree record idea at Mr. Harold Barber's in Dover.

A basket lunch with plenty of good fruit punch furnished by the Norfolk County Agricultural School was greatly appreciated by all during the noon hour. At this institution Mr. Roy Argood, the poultryman in charge, showed the members of our party their method of raising chicks on wire from the day they are taken from the machine until old enough to be put in open-air range houses on the range, wire frames being used in the brooder houses.

At the Ryan Farm, Stoughton, some 4,000 pullets under ideal range conditions, gave many of our poultrymen a chance to compare what they saw with their own birds at home.

Those who were unable to make the tour this year ought to plan to be with us next year, when we hope to make a trip into southern New Hampshire and observe how the poultrymen of that state are meeting some of our poultry problems of today.

W. B. MOORE.

Everett True, Salisbury, has one of the finest fields of Green Mountain potatoes in the county. He has used dust, and thus far has no blight. He used 1,400 lbs. of a 10-16-14 fertilizer. He is trying for the 300-Bushel Potato Club.

DEMONSTRATION ORCHARD.

The Extension Service of the Essex County Agricultural School arranged to take over the control of pruning and shaping trees of the orchard of J. W. Osborne and Son, Middleton, some two years ago. Professor W. H. Thies, Extension Specialist in Pomology at the Massachusetts Agricultural College, with the County Agent, has held demonstrations and pruned these trees. The object is to continue to exercise careful supervision over the shape and habit of growth of this fine apple orchard. There has been erected upon the highway overlooking this orchard a large sign labelled, "Demonstration Orchard. Pruning by Essex County Extension Service." All fruit growers interested in studying the most approved methods of pruning young trees are invited to stop and look over this orchard.

F. C. S.

DAIRYMEN'S PICNIC.

The first dairymen's picnic in Essex County was held at the Essex County Fair Grounds, Topsfield, Thursday, August 9, 1928. The County Dairy Committee, the Essex County Tested Herd Owners' Association, the Dairy Herd Improvement Association, the Extension Service, and the State Dairymen's Association co-operated in making this day a big success. Among the speakers were Director C. W. Warburton, in charge of Extension Work for the United States; Sumner R. Parker, County Agent Leader; George F. E. Story, County Agricultural Agent, Worcester; C. J. Fawcett, Extension Specialist, Massachusetts Agricultural College; and Evan F. Richardson, Director of the Bureau of Animal Industry, Boston.

Harvey Turner, Andover, won first prize in the blueberry pie eating contest and first prize in the quoit pitching contest. In the tug-o-war between teams representing the Tested Herd Owners' Association and the Cow Testing Association, the former, captained by R. A. Messerli, won. The women participated in a rolling pin throwing contest. Some showed considerable dexterity, but the married women went down to defeat at the hands of a young miss, who refused to divulge her name for fear of losing all future chances of ever catching a husband.

F. C. SMITH.

FROM THE COUNTY AGENT'S NOTEBOOK.

Chamney Gleason of Haverhill recently tested his herd for T. B. and has entirely cleaned house, and now owns a replacement herd of fine Ayrshires and Holsteins. He plans to put in a field of alfalfa immediately.

ALFALFA PLOTS.

The Extension Service has recently seeded three alfalfa demonstration plots, one at the Co-operative Farming Association Office at Topsfield, where June, July and August seedlings are being compared. Fred Miller, Pleasant Valley Road, Methuen, and W. D. Bragdon, Lowell Street, Methuen, both have put in demonstrations.

Edward Wigglesworth, Topsfield, has one of the finest alfalfa fields in the county. It would pay you to see it. He used about five pounds of alsike and three pounds of timothy, along with twenty pounds of Grimm seed per acre.

Miss Grace Kimball, of the Kimball Ayrshire Dairy, Merrimac, has a fine field of second-growth alfalfa, a part of which was topdressed with nitrophoska this spring. The first cutting showed a wonderful result as compared with no topdressing, and the second cutting is coming along wonderfully well.

Stuart Little, Newbury, set out some young pear trees last spring, and has adopted the mulching method.

Harry Kinney, Merrimac, has just built a new roadside stand on the main road to Haverhill. He recently sold 200 dozens of sweet corn. He has some excellent Latham and Herbert raspberries and some certified potatoes.

George Harrigan, Hamilton, has an excellent potato field, as have Louis Bourdelais, Andover, and Charles Knight, Newburyport. These men are competing with Mr. True. Watch their fields of potatoes.

John Stevens, Salisbury, plans to put in an alfalfa demonstration in 1930, planting the field to corn in 1929. T. A. Thomas of that town has a corn field that he will seed to alfalfa in 1929. These fields will bear observation.

F. C. SMITH.

WIDE-AWAKE HOMEMAKER TELLS VALUE OF KITCHEN IMPROVEMENT MEETINGS

After attending a few of the kitchen improvement meetings at the Beverly Health Center, I was greatly enthused and also inspired to renovate my kitchen.

With the help of my mother, who was as enthusiastic as myself, everything was moved into the dining-room and we started renovating the kitchen.

We have a very large basement kitchen which leads off the cellar. This made it no easy matter to do anything artistic, but we intended to brighten it up and make it as cheerful as possible.

The ceiling was attempted first; the plaster had fallen off in places and was repaired with plaster board. The problem which confronted us was,—could the plaster board be white-washed like the ceiling, or could the ceiling be painted like the plaster board? After talking it over at one of the kitchen improvement meetings, I discovered that by giving it all a coat of varnish-sizing, the whole thing could be painted a gloss white paint, and this was done very successfully.

Next came the walls and wood work. These we had thoroughly washed with warm water and ammonia, and painted gray; the walls a light and the wood a darker shade. My! how terrible the old hot-water boiler looked beside the clean wall. After a family consultation it was decided to paint it the same as the walls, and also all the water pipes. This was quite an improvement. Now we really don't mind looking at the hot-water boiler in the corner any more; nor are we fussing because there are no brass pipes to clean before company comes.

The floor had been a subject for debate in our house for some time. Should we lay the new linoleum over the old, or should we take up the old and put plenty of heavy paper under the new? As I mentioned before, our kitchen being in the basement, it was necessary to consider warmth. I received the most helpful suggestion by attending the interesting meetings of the kitchen improvement project. I discovered that frequently roofing-paper was used for kitchen floors, with two or three coats of paint, or under linoleum.

At first my mother wouldn't hear of it. She never heard of putting roofing-paper on floors before. It might be hot and hurt the feet; it might be sticky and smell rubbery, etc., etc. She thought of many things it might be, but like the good sport she always is, finally she consented to

try it. We bought two rolls of one-ply, had it fitted and securely nailed in the opposite direction to which the linoleum was laid. It is a wonderful success and we are delighted with it.

With the addition to each window of a little overhang of blue and white glazed chintz, purchased at Jordan, Marsh Co., a few yards of blue and white oilcloth nailed on the benches and shelf above the sink, which we will eventually replace with blue and gray linoleum, and two coats of gray Duco paint on the table, chairs and stools, our kitchen was greatly improved, thanks to the helpful suggestions and enthusiasm gained at the kitchen improvement meetings.

MRS. EDITH JOHNSON, Beverly.

A HOME IN A GARDEN

Note.—A homemaker was inspired to write this poem after hearing Professor Wanhon on the subject, "A Home in a Garden," during Farm and Home Week.

I would place my home in a garden,
A garden so wondrously fair
That friends might deem it a privilege
To visit and neighbor there.

I would look from my kitchen window,
Glimpse chairs and a table or two,
Awaiting the family supper,
At evening when day's work is through.

The birds I would tempt to my garden,
And frisky squirrels, too;
Pansies among the flag-stones,
Wet with the morning dew.

A pool I would build in my garden
Where a baby might tumble in,
Knowing that mother was near her
To hold up a dimpled chin.

Laughter I'd have in my garden,
Coming from girls and boys;
Pets, and a place to dig in
Takes the place of breakable toys.

I would make this a liveable garden,
With a clothes-line if need be, you know,
I'd fill every corner with flowers,
And I'd have here the trees to grow.

A little white fence with the gate flung wide,
Deep of myself I would give.
So, I'd snuggle my home in a garden,
There I'd neighbor, and love, and live.

ADAH HUNT YOUNG,
Boylston, Mass., Aug. 1, 1928.

EXTENSION COMMITTEES ALREADY ORGANIZED IN SIXTEEN COMMUNITIES

A new policy has been adopted in the women's section of the Extension Department. Heretofore each town has had one town chairman heading up extension projects in that town. Following the suggestion of the County Home Economics Extension Committee, made at the April meeting, a committee of three women will be appointed in communities co-operating with the Home Demonstration Agent. The following communities are the first to appoint such an extension committee:

Boxford—Chairman, Mrs. E. Robert Little; vice-chairman, Mrs. Emery Bradford.

Beverly—Chairman, Miss Marion Parker; vice-chairmen, Miss Dora Edwards, Mrs. George Day.

Danvers—Chairman, Mrs. Roger Conant; vice-chairmen, Mrs. James Pettingell and Mrs. Arvid Molitor.

Groveland—Chairman, Mrs. George Mitchell; vice-chairmen, Mrs. Gardner Wood and Mrs. Albert Amazeen.

South Groveland—Chairman, Mrs. John Magee; vice-chairmen, Mrs. Frank Spofford, Mrs. John Malone.

Hamilton—Chairman, Mrs. Avon Bradeen; vice-chairmen, Mrs. Edward Ready and Mrs. Horace Kilham.

Haverhill (Riverside)—Chairman, Mrs. Percy Callahan; vice-chairmen, Mrs. Walter Eaton and Mrs. Edgar Trull.

Ipswich—Chairman, Mrs. John Goodhue; vice-chairmen, Mrs. Walter Hulbert and Mrs. Charles Canney.

Merrimac—Chairman, Mrs. Horace Hoyt; vice-chairmen, Mrs. George Argent and Mrs. Malcolm McDonald.

North Andover—Chairman, Mrs. B. W. Farnum; vice-chairmen, Mrs. H. E. Mead and Mrs. M. C. Harraden.

Peabody (West)—Chairman, Mrs. B. P. Danforth; vice-chairmen, Mrs. H. W. Rankin and Mrs. Forest Southwick.

Middleton—Chairman, Mrs. H. K. Richardson; vice-chairmen, Mrs. Lewis Anderson, Mrs. William Martin and Mrs. Alfred Harrington.

Routley (Danielsville)—Chairman, Mrs. J. B. McCormick; vice-chairmen, Mrs. B. Harris Hardy and Miss William Wallis.

Saugus (Cliffendale)—Chairman, Mrs. E. K. Hayden; vice-chairman, Mrs. E. F. Tarbox.

Lynnhurst—Chairman, Mrs. William Atkinson; vice-chairman, Mrs. Andrew Townsend.

West Newbury—Chairman, Mrs. James Holmes; vice-chairmen, Mrs. Philip Poore and Mrs. E. Spencer Poore.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 9

HATHORNE, MASS., SEPTEMBER, 1928

NO. 9

OLIVER E. HOLMES, ESSEX AGGIE
'24, NOW IN CHARGE OF DAIRY
HERD IN CUBA

Oliver E. Holmes, of Swampscott, and a graduate of this School in the Class of 1924, is now located at Port Preston, Cuba, where he is in charge of a large dairy farm owned by the United Fruit Company.

After graduating from this school, Holmes was employed as herdsman at the Wood Lea Farm in Upton, Mass., where he remained a year. He resigned this position to go to Stratton, N. H., as a milker of test cows. For the past two years he has been herdsman on the A. C. Burrage estate at Beverly Farms, leaving to accept a position with the United Fruit Company.

In a letter to Director Smith, dated July 20, Holmes gives a description of dairy conditions in Cuba. "I have at present 103 mature cows in my dairy, 67 of them milking. These cows are milked only once a day by four dairy boys. These 67 milking cows give, on the average, 285 quarts a day, or a little over four quarts per cow. The lactation period is about eight months.

I have 15 grade Holsteins in my herd, the rest being native Creolin cows, with some Buffalo cow blood in some of them.

Cows are fed pasturage every day of the year in Cuba, hay being unknown. Chopped pumpkin, chopped sugar-cane tops, and a small amount of dairy grain, completes their diet.

Four pastures converge at the corral, with a total acreage of 407. There is a pasture of 87 acres for calves and slaughter animals, also a large pasture for dry cows and young stock.

Two varieties of grass are grown, guinea and para, the guinea being much preferred. Run-down pastures are replanted by setting out clumps of grass roots in three-foot blocks. These roots are gathered on the roadside and are set in holes made by a mattock, or in furrows made by a plow. This is done just before rain is expected. The grass is allowed to grow until it goes to seed, and then spreads over the pasture. The pasture is then burned over. When the grass reaches maturity it is ready to be fed.



CURING CLOVER HAY IN ESSEX COUNTY

With our increased interest in growing clover and alfalfa hay, and with our wet, cold, stormy summers, should we consider this very effective method of curing the hay crop?

Barns in Cuba have no sides, only roof, floor and roof supports. Stationary stanchions and cribs are used in my barn for equipment.

I am anticipating many improvements under appropriations for next year, including electric lights and dairy equipment. In the meantime I am getting the pastures in good condition and breeding for better dairy animals. I have a good Holstein bull for a herd sire.

Milk from native cows tests about 1.5 to 2.0. It is very rich in vitamins, more so than stable-fed animals produce, due to the green grass.

Milk retails in Preston for 10 cents a quart. The cost to produce milk here is less than four cents per quart.

As you can see dairying conditions in Cuba are not as favorable as in the dairy sections of the States."

We gather from the above that this Essex Aggie graduate is right on the job, trying to improve pasture conditions, build up a better herd through breeding, and install modern dairy equipment.

DO MANGELS PAY?

Some have asked whether it pays to grow mangels for cows and poultry, and how much it really costs. In order to find out, the County Agent with Professor Branch of Massachusetts Agricultural College, secured records for two years. Draw your own conclusions.

FARM OF W. A. WOOD, HATHORNE

	1926	1927
Acreage Grown	11 $\frac{1}{2}$	13 $\frac{1}{2}$
Total Yield	32 tons (est.)	42 tons
	Cost for	Cost for
Materials:	entire piece	entire piece
Seed 10 lbs.	\$11.00	11 lbs. \$18.00
Fertilizer	600 lbs.	12.00
Manure 5 cds.	37.50	5 cds. 37.50
Labor		
Plowing & fitting land	\$17.00	\$27.00
Planting	3.50	5.00
Thinning and weeding	50.00	54.15
Cultivating	5.00	8.75
Harvesting	60.00	32.50
Use of Land	15.00	21.00

Total cost 199.00 212.90
Cost per Acre 149.30 121.66
Cost per Ton 6.22 5.07

Man labor charged at cost, from \$2.50 to \$3.50 per 10-hour day. Boy labor charged at cost, 20 cents per hour.

FOOTBALL SCHEDULE, 1928

Oct. 5—Peabody.
Oct. 12—Swampscott.
Oct. 20—Manchester.
Oct. 27—Wilmington.
Nov. 3—Saugus.
Nov. 10—Stoneham.
Nov. 17—Salem, N. H.
Nov. 24—Gloucester.
Nov. 29—(Thanksgiving Day) Danvers

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CALENDAR

October 1—Opening Day for advanced students in Agricultural Department.

November 27—Graduation Day for Class of 1928.

ENROLLMENT

The present enrollment of 338 students in the Agricultural and Homemaking Departments is perhaps the largest ever enrolled at the School.

In 1913, when the School was established, the number of students enrolled was only 79. The increase has been steady from year to year, and indicates a healthy growth, which is gratifying to all interested in this School and its work.

SEASON CLOSES AT CAMP BAUER

With Alton G. Perkins of Lynn as Counsellor, and the boys themselves doing everything possible to make camp life pleasant, the season just closing has been most successful.

Wholesome recreation has been emphasized more than in any previous season. With Director Smith as guide, one trip was taken to Nahant, stopping at High Rock, Lynn, to get a view of the coast. Another trip, with Instructor Moore as guide, was made to Marblehead. Other trips to nearby beaches were made, as the boys with the exception of one or two are excellent swimmers.

The trip to Ipswich, on August 29, was a fitting climax to the season. Director Smith arranged for a real corn roast and clam bake on the sands of Plum Island. This was carried out very successfully.

Early in the season the boys organized a baseball team. Seven or eight games were played, with all but one

resulting in victories for the Aggie boys.

Looking back over the season just closing, the feeling is prevalent that the boys have helped in a large measure to make the season of 1928 a successful one.

AT THE FAIR

The Haverhill Poultry Association egg exhibit contained 47 entries. This association, which at present has a membership of 75, was organized by Ernest A. Howard, Essex Aggie '18.

Seth Lambert, a member of the Methuen 4-H Boys' and Girls' Canning Club, took first prize on an exhibit of canned pineapple.

Two students and one graduate had charge of herds in the cattle exhibits at the Fair. These were Robert Ellis, of the Donnbriest Farm, Topsfield; Herbert Kirk, of the Wood Farm, Hathorne, and Wilfred Jordan, of the Argilla Farm, Ipswich. William Wilson, a senior student, was employed in the Poultry Department.

4-H CLUB EXHIBITS

The 4-H Club exhibits contained 400 separate entries and well illustrated the work of the Junior Department of Extension Service. The canning club exhibited 900 separate jars of vegetables and fruits and about 100 jars of jelly. Other exhibits were made by the Clothing, Handicraft, Lunchbox, Garden and Forestry clubs.

SCHOOL EXHIBITS

The main exhibit of the School was located in Grange Hall and served as headquarters for instructors, graduates and students who visited the Fair. Other School exhibits were shown in the Fruit, Vegetable, and Flower departments.

FAIR EXHIBITS

The School and its staff of instructors have always realized the educational value of exhibiting at Topsfield Fair. This year the main School exhibit illustrated agricultural and homemaking progress over a period of fifteen years, the length of time the school has been in existence. The exhibit included sections in poultry, dairy and homemaking. A section was also given over to the work of the Home Demonstration Agent. The exhibit attracted considerable attention and well illustrated improved methods which are now quite common on the farm and in the homes of this County.

GRANGE EXHIBITS

The exhibits of farm and home products displayed by the Granges of Essex County were excellent and fully up to standards set in past years. Boxford Grange received first prize; Beverly, second; and West Boxford, third.

JUNIOR JUDGING CONTESTS

At the Junior Judging Contest held

EVENING POULTRY COURSE TO BEGIN TUESDAY, OCTOBER 2

The third annual Evening Poultry Course opens Tuesday, October 2, 1928, at 7:30 p. m., and continues on Tuesday and Thursday evenings for 21 lessons, the closing lesson on Thursday evening, December 13, 1928.

This course will be conducted by Instructor F. L. Edwards, of the Poultry Department of the Essex County Agricultural School, and is limited to 20 members, men or women, residents of Essex County, over 18 years of age.

The object of the course is to give practical instruction in the elements of poultry keeping. No person is eligible for this course unless he either owns and handles poultry or is an employed person caring for poultry, as the school attempts to supervise the work of evening students for six months of the following poultry season.

The program of instruction will consist of classroom work, demonstration and practice, and round table discussion. The demonstration and practice will consist of individual work by each student in culling, killing and dressing, preparing for roasting, broiling, or fricasseeing, reading of blue prints, poultry carpentry, pest control, etc. Every lesson will end with a round table discussion, in which any matter not clear to the individual student may be analyzed and discussed.

Tuition is free to residents of Essex County. Cost for text book, note book and account book will be less than \$5.00. "Practical Poultry Management," by Rice and Botsford, will be the only text book required.

The School poultry plant, with its flock of several hundred hens of the three principal commercial varieties, with its incubation equipment of electric, hot-water and hot-air type machines, and with its individual and barracks system of brooding, makes the ideal laboratory for class work.

Inasmuch as this course is limited to twenty, it is advisable that prospective members communicate at once with Director F. A. Smith, Essex County Agricultural School, Hathorne, Mass.

at the Topsfield Fair, Saturday, September 15, the following Essex Aggie boys won several places in the various contests.

In the Fruit Judging Contest, Thomas Gould of Essex won first place, Lawrence Maguire and Arthur Gordon were tie for third place. Sidney Batchelder and Milton Soper, both students at the School in the entering class, won second place and third place in the Vegetable Judging Contest.

RAISING MUSHROOMS A NEW INDUSTRY FOR ESSEX COUNTY

LARGE PLANT NOW IN OPERATION NEAR PEABODY AND DANVERS LINE

A new and decidedly unique agricultural industry for Essex County, a mushroom farm, has been established at 169 Sylvan street, Danvers, near the Peabody line. This new enterprise is incorporated under the name of the New England Mushroom Company, with Clarence H. Newlin, president, and J. H. Bramble, treasurer. Both of these men have had long experience in the raising of mushrooms in Chester County, Pa., which produces 80 per cent of the mushrooms in the United States. Their idea in coming north was to tap the New England and Canadian markets and also to raise two or even three crops a year. Mushroom growing requires a cool climate. The sheds are kept at 48 degrees after the crop has started.

The mushrooms are grown in three large sheds, resembling ice houses, which together cover an area of 212 by 66 feet. Each shed has two compartments and each compartment has two sections of frames on which the mushrooms are grown. There are six frames to a section, three below ground level and three above. These frames resemble florists benches and are filled with dehydrated manure, upon which is placed a small piece of mushroom spawn to every square foot. After a month the manure bearing this spawn is covered with one inch of loam. When the crop is well started it will continue to bear mushrooms for a period of three months. After the manure is removed, the frames are thoroughly cleaned and made ready for a new crop.

One phase of the industry which is still unknown, even to most mushroom growers, is the raising of the spawn. The few men who know the secret, control the industry. Mushroom spawn is shipped in glass containers, to prevent contamination.

There is little doubt but that this new venture will flourish, and mushroom growing become a factor in the agriculture of the county.

Sidney Batchelder, Andover, has a T. B. tested herd and is operating a small milk route and supplying a high grade of clean, safe milk to his customers. He also has set out a fine young orchard, plans to put up a silo, and is growing some excellent sweet corn.

ESSEX POULTRYMAN LEADS STATE

In the record of production contest for large flocks of 1,000 pullets or more, Homer Rowell, Groveland, leads the state. The average production per pullet is 146.6 eggs for the year.

William P. Foster, Andover, stands fourth, with an average production of 136.4 eggs per pullet.

In the medium-sized flocks, 500 to 1,000 pullets, A. S. Pendleton, Ballardvale, gets second place, with an average production of 149.2 eggs per pullet.

There are 18 poultrymen reporting from Essex County. It is gratifying to know that these men are doing so well.

The per cent production in the Rowell flock since November 1 was 53, in the Foster flock 50, and in Mr. Pendleton's 47.

Mortality in these flocks was below the State average of 12.8 per cent. Rowell's was 11 per cent, Foster's 7 per cent, and Pendleton's 9 per cent. The lowest mortality rate in Essex County was 2.6 per cent, reported by Hartwell Reid, Amesbury. His flock averaged 153.7 eggs per bird since November 1.

THE ESSEX COUNTY HONOR ROLL

Production per pullet	
J. P. Bunker, Beverly	163.9 eggs
Hartwell Reid, Amesbury	158.7 eggs
A. S. Pendleton, Ballardvale	149.2 eggs
Homer Rowell, Groveland	146.6 eggs
Stanley Roach, East Lynn	146.2 eggs

CUP FOR FIRST TOWN TO TEST

FRANK B. CUMMINGS OFFERS STATE TROPHY

Frank B. Cummings, ex-director of the Division of Animal Industry, has offered a silver cup to the town which is first to have all its cattle tested for tuberculosis. There are a number of towns in the State which are already near enough 100 per cent tested to make quite a contest for the cup.

Blandford, in Hampden County, is reported to have only one untested herd. That is the nearest to a universally tested town there is in Western Massachusetts, but there are several towns in Barnstable County which are close to the top. Truro is reported to have only three untested cows. Provincetown is reported to have only one untested herd.

County agents and others interested in the eradication of bovine tuberculosis, are urging these towns to get the last men signed up immediately, as Evan F. Richardson, director of the Division of Animal Industry, says the tests will be made in the order of their application. It is probable that no town will claim the cup until after December 1, when the increased indemnity will go into effect.

The Division of Animal Industry is willing to receive applications for a test any time now, with the understanding that such tests are not to be made until after December 1, so that the owner can get the benefit of the increased State indemnity of \$25 a head.

SUMMARY OF WEATHER OBSERVATIONS

June—July—August 1928

	June	July	August
Maximum temperature	89 (14th)	93 (8th)	98 (4th)
Minimum temperature	42 (11th)	49 (30th)	51 (12th)
Average daily temperature	62.5	70.5	71.5
Greatest change in temp.	33° (12th)	38° (8th)	34° (14th)
Least change in temp.	27° (6th)	62° (6th)	47° (25th)
Precipitation for month	6.14"	3.71"	3.74"
Boston normal for month	2.89"	3.36"	3.62"
Excess over normal	3.25"	.35"	.12"
Total rain for year to date (Sept. 1)	..	..	28.67"
Boston normal to date	..	..	27.73"
Excess to date	..	..	.92"
Ave. rel. humidity 8 A. M.	77.3%	78.3%	80.9%
No. days on which rain fell	14	8	12
No. clear days	13	16	13
Partly cloudy days	7	7	7
Cloudy days	10	8	11
Total hours sunshine	231	294	243
Per cent sunshine	50.5	63.2	56.5

August was reported by the Boston Weather Bureau as the hottest August on record. Compared with last August, our records show it to have averaged 7 degrees warmer, a remarkable difference in the two years.

The month of June was notable for its rainfall, enough falling to more than wipe out a deficiency of 2.83" which existed June 1, and give a slight excess, which has been added to in both July and August. —H. A. Mostrom.

ESSEX COUNTY 4-H VEGETABLE EXHIBIT WINS THIRD PRIZE

Essex County won third place and a fifteen dollar cash prize in the vegetable exhibit contest submitted by the 4-H Boys' and Girls' Club, held at the Vegetable Growers Convention at South Bend, Indiana.

First place and twenty-five dollars went to Onondago County, New York. Second place and twenty dollars was awarded to Cuyahoga County, Ohio.

This is considered exceptional, in as much as the exhibits were entered from all sections of the United States.

The Essex County Exhibit was assembled by R. B. Ewing, County Club Agent, and Instructor Stearns, from the gardens of Harold Rogers, Ward Hill; Arthur and Herbert Henderson, Andover; Arthur Gordon, Rowley; and Harry Yezegelian, Methuen. The vegetables exhibited were string beans, peppers, beets, carrots, potatoes, cucumbers and parsnips.

BOYS' AND GIRLS' 4-H CLUB WORK

Back of 4-H Club Work is the U. S. Department of Agriculture and the land-grant colleges, operating under the Smith-Lever Act to bring about "efficient agriculture, an adequate food and clothing supply, an enriched country life, and an alert, satisfied, progressive rural people." It is interesting to note that more than 550,000 rural boys and girls are enrolled in this work. The term 4-H signifies the four things which must be trained by the boy and girl to insure success in Club undertakings, namely, Head, Heart, Health and Hands. The symbol of the 4-H Club is the four-leaf clover. This work offers a fine opportunity to agricultural and home economics teachers in rural sections.

EXTENSION WORKER CANS 321 JARS OF VEGETABLES

Mrs. James Holmes, Chairman of the Extension Committee in West Newbury, tells us that she has preserved 321 cans of vegetables this season and plans to put up 144 more jars. This in itself would be a season's work of which to be proud, but more than this, Mrs. Holmes has raised all the vegetables, doing the work herself, with the exception of a boy's help at planting time. Mrs. Holmes finds a ready market for all her products.

STATE SPECIALISTS TO CONDUCT PROJECT LEADER GROUPS IN FURNITURE RENOVATION AND GARMENT FINISHES.

Plans are being made for two courses to be given in the southern part of the county by the State Specialists, Mrs. Harriet T. Haynes, Home Management Specialist, and Miss Esther B. Cooley, County Clothing Specialist.



MRS. HARRIET T. HAYNES,
STATE HOME MANAGEMENT SPECIALIST

Groups of women interested in furniture renovation and garment finishes are being organized. Two project leaders from each group attend the lessons given by the specialists and then return to their community group and give back the information received. By this method a large number of women may receive aid from these specialists, whose time has to be divided among all counties in the state.



MISS ESTHER B. COOLEY,
STATE CLOTHING SPECIALIST

The bi-monthly business meeting of the County Home Economics Extension Committee will be held this month. Luncheon will be served at the Israel Putnam Tea House.

NEW FACTS IN NUTRITION

Pasteurization of Milk.

Milk is pasteurized primarily for the purpose of making it safe for human consumption.

Vitamin C is largely destroyed in pasteurization, but it is present only in very small quantities in any milk over 24 hours old. Orange or tomato juice supplies this deficiency.

Cod Liver Oil Tablets.

The market has been flooded with cod liver oil tablets and extracts. None of these products have been found to date to be as efficient as the pure cod liver oil (not emulsions).

Irradiation of Foods.

Irradiation of ultra-violet ray gives foods the same potency possessed by cod liver oil in the cure and prevention of rickets. Irradiation is only in its beginning.

Anemia.

Liver continues to hold first place in the treatment of the various types of anemia, from the simple to the pernicious type.

In an analysis of various animal tissues, in general the iron content of the internal organs was found to be higher than that of the other tissues. Kidney, pancreas, liver and spleen were relatively high in iron, the amount increasing from the kidney to the spleen in the order mentioned. Beef juice prepared as for infant feeding was very low in iron. From the standpoint of iron content, hog liver is the best type liver to use in the cure and prevention of anemia.

—MAY E. FOLEY.

HOME FLOWER GROWING

For the person who would grow flowers and decorative plants at home for pleasure, indoors and out, and who wishes to understand the principles and practices necessary for success.

The amateur gardener will find here all he needs to know about plant propagation and culture, how and where to grow flowers and plants for best results, in the open ground, as part of the home planting scheme, indoors in winter, in window boxes, hanging baskets, rock gardens or water gardens; and how to arrange cut flowers for best effects.

The book also gives suggestions on organizing a garden club, with suggested constitution and by-laws, topics for discussion, holding community flower shows, their management, exhibits, and judging.

(Author, Emil C. Volz, Professor of Floriculture, Iowa State College; publishers, The Macmillan Company, New York. Price \$3.50.)

ESSEX FARMER AND HOMEMAKER

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VOL. 9

HATHORNE, MASS., OCTOBER, 1928

NO. 10

FISH REARING STATIONS MAY BE ESTABLISHED IN ESSEX COUNTY

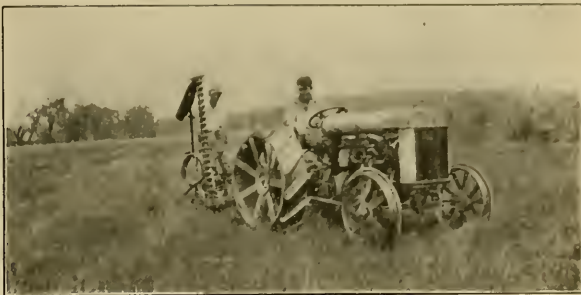
Chapter 17 of the Resolves of 1928 directs the Department of Conservation "to investigate relative to the advisability, feasibility and cost of the establishment and maintenance by the Commonwealth of one or more fish-rearing stations in the County of Essex."

For trout culture there should be a water supply of at least a thousand gallons of spring water a minute. The temperature should run from 48 degrees to 60 degrees in extremes of cold and hot weather. The contour of the ground must permit of a four-foot fall to every hundred feet, in order to obtain proper aeration in pools. The area for pool sites must be sufficiently free from large boulders, stumps, quicksand, or deep muck to make possible the construction of pools at a reasonable cost. The location must be reasonably near a good road to permit the use of trucks in operating the plant.

For pond fish (pickerel, perch, horned pout, and bluegills), there should be a series of ponds from ten to twenty-five acres each, brook or spring fed, but so situated that the ponds can be drawn absolutely dry and the fish easily collected at the outlet of each pond. Such ponds should run from ten feet to nothing in depth. They should all be on the same brook (or tributaries) to permit of economic operation. The location should permit of putting at least a hundred acres under water, divided into ponds as above. The contour of the ground must be such as to permit the construction of dams at a reasonable cost. The unit must also be near a road that will permit the use of trucks in operating it. The temperature is relatively unimportant, though for pond fish it can be much warmer than for trout.

During the past three years local clubs and representatives of this Division have investigated all of the locations for a trout-rearing station that have been brought to our attention, and a suitable location has yet to be found. The same may be said of the site of a pond cultural unit.

The Division will be pleased to receive communications from any individual or group in the county, specifications on any location which may appear to meet the above requirements for either group of fish. We



This is James Forrest, Essex Aggie 1930, of Methuen, on his Fordson. The camera caught him as he was headed for dinner one noon. James did the mowing on about 45 acres and hauled the hay to the barn with the tractor.

He also plowed and fittted about five acres in the spring, and expects to do considerable fall plowing for himself and others. Several of our boys are finding the ability to operate a tractor a valuable asset. A. L. D.

earnestly urge everyone to be very careful in suggesting any locations. A thousand gallons a minute means a large water supply for trout. For the pond cultural units the complete and perfect drainage and adequate water supply are basic requirements.

Address all communications on this subject to the Division of Fisheries and Game, State House, Boston, Mass.

ALUMNI BANQUET AND DANCE NOVEMBER 27

The Essex Aggie Alumni Association banquet and dance will be held at Hathorne after the graduation exercises on November 27. Following a short business meeting, which will be called to order at 5:30 p. m., members of the alumni, Board of Trustees, and faculty will gather in the Homemaking Building for the annual banquet. Weigel of Lawrence will enter. The annual fall dance of the association will immediately follow the banquet. Tickets for the banquet \$1.50, and dance 50c, may be obtained from the secretary of the association. Address Robert B. Ewing, Hathorne, Mass.

There are two types of persons: (1) those who didn't think, and (2) those who think but don't care; from both types, Good Lord deliver us.

The consciousness of having done an honest day's work is not the least of life's satisfactions.

VIOLA MESSER, HOMEMAKING STUDENT, LEADER OF 4-H CANNING CLUB

Viola Messer, of Methuen, a senior in the Homemaking Department of this School, has accomplished much during the past summer as leader of the 4-H Canning Club in her community. With experience gained in the Canning classes of the School she successfully conducted a group of three boys and eleven girls in the work of canning fruits and vegetables, having all of them meet every requirement of the club.

In order that the club meetings, which were held twice a week, should not be too tedious, Miss Messer led the children in games and singing while the jars were processing. Her work with the young folks attracted the attention of their parents, several of whom attended every meeting of the club.

When the season was over and the jars of jelly, fruit and vegetables were counted, it was found that 11 members had canned a total of 550 jars. The club exhibited some of their product in the 4-H Club section of the Topsfield Fair, and won eight prizes.

It was a busy summer for Miss Messer, for in addition to the work of leading the club, she canned a total of 395 jars for her own home, made five children's dresses, and several articles of clothing for herself. She also exhibited goods at the Topsfield Fair, winning 15 prizes.

Essex Farmer and Homemaker

HATHORNE, MASS.

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CALENDAR

Science Day—November 2.
Graduation Day—November 27.
Alumni Reunion—November 27.
Thanksgiving Recess—November 28 to
December 3.

GRADUATION

All plans at the School are now
bending toward Graduation Day. The
graduation exercises will be held at
the School on Tuesday afternoon, No-
vember 27th, at 2 P. M. On this date
another large class will receive their
diplomas and complete their official
school day connections with the
School.

NEW TEACHERS

The largest student body in the history
of the School is now enrolled
for the present school year, and has
made necessary some changes and in-
creases in the staff. Miss Ethel M.
Moore has been appointed to fill the
vacancy caused by the resignation of
Miss Erickson. Miss Moore's work
will be entirely with foods. She will
have charge of the dietetic courses
which occupy such a large place in
the instructional work of the School.
Miss Moore is a graduate of the
Framingham Normal School and has
had a wide experience, both as an
instructor and in commercial work.

Miss Verna L. Clarke has joined
the Staff as an instructor, and is de-
voting her entire time to the teaching
of academic subjects, mainly English
and History. She comes to us from
the Quincy Homemaking School. She
is a graduate of the Bridgewater
Normal School and has taken special
courses at Boston University, Har-

vard, Columbia, and the University of
Colorado.

Miss Lucinda Bousley, a graduate
of the School in the Class of 1916, has
been added as an assistant in the
Homemaking Department. Miss Bous-
ley is a graduate nurse and has had
several years of practical experience
as school nurse and district nurse, as
well as private practice. She is teach-
ing science, physiology, hygiene and
home nursing.

In the Agricultural Department,
Mr. J. Harris Todd has joined the
Staff as an instructor in the Farm
Mechanics Division. Mr. Todd is a
graduate of the Massachusetts Agri-
cultural College and has had a long
and varied experience in farming and
mechanics work.

DATA ON NEW STUDENTS

Summaries of the questionnaires
submitted by the 80 students enrolled
in the Agricultural Department have
been tabulated. Some facts concern-
ing the character of the new students
and their geographical distribution
may prove of interest. It was found
that only 19 of this group lived on
farms. Fifteen of the 80 have been
4-H Club members. The average age
was found to be 16.

Regarding geographical distribu-
tion, eight of the number, or 10%,
are from Salem. Lynn sends the next
largest number, with a total of six.
Saugus, Rockport and Andover each
send five. In the following list the
number of students from each place
is indicated by the number in paren-
thesis

Amesbury (2), Beverly (4), Byfield
(3), Fitchburg (1), Gloucester (1),
Hamilton (1), Haverhill (4), Law-
rence (3), Lynnfield Center (1), Mar-
blehead (4), Melrose (1), Merrimac
(1), Middleton (2), Medford (1), Meth-
uen (4), Newbury (2), Newbury-
port (1), North Andover (4), Pea-
body (2), Rowley (3), Swampscott
(3), Wenham (1), West Newbury (1),
Winchester (1).

ANNUAL SCIENCE DAY

The Science Department announces
that the Annual Science Day at the
Essex County Agricultural School is to
be held on November 2d this year.

Last year a large number of stu-
dents participated by various exhib-
its, such as flower collections, rock
collections, and collections of insects,
drawings, seeds, woods, etc. The
Science Department hopes that the
students now in school will partici-
pate even to a greater extent this
year. Prizes are awarded.

Director Smith is arranging to have
a prominent speaker for the day at
the School. O. E. CARLSON.

BOARDS OF TRADE OUTING

The Essex County Associated Boards
of Trade, with friends, to the number
of about 125, made a visit to the
farms and places of interest in Essex
County, on Wednesday, October 10th.

They first visited the School, in-
specting the various divisions, notably
the Poultry, Greenhouse, and Fruit.
The next stop was made at the New
England Mushroom Company on Syl-
van Street in Danvers, where all had
a chance to see a new agricultural
enterprise in full operation. Build-
ing, growing, harvesting and packing
were operations noted at this place.

Autos were again requisitioned and,
under the guidance of a State Officer,
the party proceeded to Cherry Hill
Farm, where an hour was spent in-
specting stock barns, cattle, dairy
plant and grounds. It was a revela-
tion to the visitors to see the care
and scientific work which is put into
the production of a quart of milk.
In fact they are producing 2,250
quarts daily at the present time on
this one farm. After luncheon in the
beautiful grove at Cherry Hill Farm,
the party proceeded to the general
farm of Mr. Melville Grey in Wen-
ham. It was certainly a most inter-
esting feature to see the various prod-
ucts of this small, diversified farm
handled and marketed in such an
efficient manner.

The next visit was to the orchard
farm of Dr. J. L. Goodale and Son
in Ipswich. The visitors enjoyed the
packing shed and storage cellars on
this place. Goodale and Sons have
planted over 7,000 trees of the most
approved varieties and are just com-
mencing harvesting from these splen-
did young orchards. One of the fea-
tures of this place was an opportunity
to see and learn about the never,
promising varieties of fruit.

For the last stop the group were
the guests of Mr. Richard T. Crane,
Jr., at Castle Hill Farm, and under
the guidance of Superintendent Wil-
liam Cameron, they saw gardens and
grounds, greenhouses and farm build-
ings under the best of conditions.
Everyone was loud in praise of the
wonderful development and beauty of
this attractive estate.

This is the first attempt of the
County Boards of Trade to learn by
direct visit and inspection something
about these outstanding farms and es-
tates in our own county. Everyone
agrees that the day was profitably
spent and should have the best of
results.

"Life is a grindstone, and whether
it grinds a man down or polishes him
up depends on the stuff he's made of."

REPORT OF CORN VARIETY TEST

CONDUCTED BY THE EXTENSION SERVICE
OF THE ESSEX COUNTY AGRICULTURAL
SCHOOL, CO-OPERATING WITH INSTRUCTOR
THURLOW OF THE FARM CROPS DIVISION
OF THE SCHOOL.

The corn was planted June 14, 1928, with a two-row corn planter, 42 in. apart. Six cords of manure and 300 pounds of superphosphate (acid phosphate) were applied per acre.

Two rows of each variety were planted. They were harvested September 22, 1928, after a total of 100 growing days. On the average the corn was in ideal condition for silage when cut.

One two-hundred-fiftieths of an acre was cut of each variety. The average maturity, total weight, weight of ears, were secured, and later these were computed on dry weight basis by using formula from five different experiment stations as a basis. Then all were figured on the basis of one acre for easy comparison.



HAROLD HOLDEN, CLASS OF 1922, IS OFFICIAL TESTER FOR THE ESSEX COUNTY DAIRY HERD IMPROVEMENT ASSOCIATION

CORN VARIETY TEST RESULTS

Variety	Maturity	Green Weight Tons Per Acre	Ears Tons Per Acre	Dry Weight Tons Per Acre Computed
Commercial Sweepstakes	Milk	16.1	5.3	3.5
Alvard's White Cap Dent	Late Milk	12.0	3.5	3.0
West Branch Sweepstakes	Early Milk	18.1	5.4	3.6
Cornell Selection No. 12	Late Milk	19.1	4.9	3.5
Cornell Selection No. 11	Early Dough	15.9	5.3	4.1
Certified Cornell No. 11	Early Dough	17.1	5.6	4.5
King Philip (Flint)	Early Glazed	9.5	2.0	2.8
Webber's Early Dent	Early Denting	15.9	4.0	4.8
Lancaster Sure Crop	Milk	19.1	4.37	4.25
Imported Leaming	Early Milk	21.5	5.0	4.25

The percentage of dry matter is determined largely by maturity and humidity. Averages, as given below, were used: Tassel 13%, Silk 15%. Grains formed 17%, Early milk 20%, Milk 22%, Late milk 25%, Dough 28%, Denting or glazing 30%, Mature or glazed 35%.

Of course, these are results for but one year. For the dairyman who wants food value per acre, or dry matter per acre, this test indicates the desirability of continuing this work for another year, and what varieties to test out on his own farm. Without question King Philip is too early and too light a producer. On the other hand, it is certain that for digestibility, maturity, yield of ears and of dry matter, Webber's Early Dent and Cornell No. 11 need further consideration and trial. The Certified Cornell No. 11 certainly did well, both in green weight and ears, and the dry weight was good.

For this particular year the other

varieties were not sufficiently mature to make an ideal silage. For dairy feeding, early glazing or early denting makes the best stage of maturity. Further testing of Cornell No. 11, Webber's Dent, Improved Leaming and Lancaster Sure Crop is necessary. For higher altitudes and shorter growing seasons the first two are likely to give the best results; for late soils at low elevations and where the season is longer, the two latter varieties are more likely to give best results.

F. C. S.

C. D. Abbott, Andover, has a nice field of alfalfa standing knee deep on September 20

The Market Garden Field Station found that carrots planted June 15 developed no maggots; June 1 showed 10% injury; May 15 had 85% affected, and May 1 all were badly maggoted.

VALUABLE HERD TEST REPORT

The Essex County Herd Improvement Association has published in pamphlet form, a readable, comprehensive, instructive report on the work of the first year. The report was compiled by F. C. Smith, County Agricultural Agent, and F. H. Branch, Farm Management Specialist of the Massachusetts Agricultural College. The data gathered has been so treated by the compilers of the pamphlet that it can be read with profit by all Eastern States dairymen, especially those engaged in making milk on high-priced land near congested districts.

A limited number of copies of this report are available at five cents each, and they can be procured from the Essex County Agricultural School, Hathorne, Mass.

A recent study was made of the Aggie School herd. The manure was credited at \$16, and the calf at \$5 when dropped. Labor, actual figures, averaged \$47.87 per cow. "Other Costs" were computed by adding 1/4 of the feed and labor cost to the total of these, and thus the final cost of production was determined. This method gives reasonably accurate ideas as to costs and comparisons.

Let us compare two cows, present value as grades when fresh about \$185, Guernseys. Cow 25 showed a gross return of \$285.50, costs \$259.95, yield 5542 lbs., net profit \$25.55. Cow 26, receipts \$408.83, costs \$283.74, net profit \$125.09, yield 8807 lbs. The percentage return on the investment on 25 was 13, and on 26 was 67.

F. C. S.

BETTER HOMES COMMITTEES ENTERTAINED AT MRS. STORROW'S FARM IN LINCOLN

Mrs. James J. Storrow, State Chairman of the Better Homes in America organization, awarded certificates and prizes for outstanding achievements accomplished in Massachusetts during the Better Homes campaign in April. Certificates were given for architectural merit, landscape architecture, home improvement, lodging-house improvement, and bird sanctuaries. The certificates were signed by Herbert Hoover, President of the Association. The prizes were given by Mrs. Storrow. About 200 members were present, including Mr. James Ford of Washington, executive director. Essex County was represented by Mrs. C. S. Wright of Danvers, Miss Marion Parker of Beverly, Mrs. George Mitchell of Groveland, Mrs. Mary McIntire of Salem, and Miss Crawford, the County Home Demonstration Agent.

Mrs. Mitchell was Chairman of the Groveland Committee, which has conducted a Demonstration House and was granted a special certificate from the national headquarters.

STATE CLOTHING SPECIALIST INSTRUCTS COMMUNITY LEADERS IN GARMENT FINISHES

Pockets, their construction and application, was the subject taught by Miss Cooley, State Clothing Specialist, to sixteen community leaders at their first meeting. These leaders will pass on the information to 110 women in groups which they have organized in their communities. The following women attended Mrs. Maurice A. Mansell and Mrs. Elizabeth Walker of Georgetown; Mrs. Mason Downing, Mrs. Robert Hurd, Mrs. B. W. Farnum and Mrs. William Harraden of North Andover; Mrs. William Martin and Mrs. Milton Berry of Middleton; Mrs. Harold Mostrom, Mrs. George Sargent, Mrs. Roger Conant and Mrs. Elmer Guppy of Danvers, Mrs. Robert Little, Mrs. Frederick Noss, Mrs. Harry Moore and Mrs. Charles Bixby of Boxford.

PROTECTING BABY FROM DISEASE IN WINTER

Summer used to be the hardest time for babies. Mothers have now learned so much about the care and feeding of their infants that the intestinal disturbances of hot weather have practically gone out of style.

Winter now presents the greater danger. Mother must be on the alert constantly to fight the ever-present

colds and their serious consequences. The best way to do this is by increasing the baby's resistance.

Feed the baby properly, being sure that he has orange and cod-liver oil daily.

Keep the house well ventilated and take the baby into the fresh air and sunlight as much as the weather permits.

Give him a midday nap.

Dress him according to the temperature, not according to the season.

Give him a cool sponge bath and a vigorous rub every morning.

Keep him away from everyone who has a cold or other respiratory infection.

—Hygeia.

RENOVATION OF FURNITURE STARTS IN OCTOBER

The first all-day meeting in the Renovation of Furniture, conducted for community leaders, was held at Essex Aggie on October 11. Before nine o'clock women began to arrive with their attic treasures, which they intend to restore to their former glory. The meeting was conducted by Mrs. Haynes, State Home Management Specialist, assisted by Mrs. McIntire.

Instruction was given in making the necessary repairs and removal of old finish. One hundred and twenty-five women have enrolled for this course.

The following women will act as community leaders: Mrs. Frederick Bond, Mrs. Robert Little and Mrs. Frederick Noss of Boxford; Mrs. Daniel Appleton and Mrs. James Foster of Beverly; Mrs. Arvid Molitor, Mrs. James Pettingill, Miss Mary McGuigan and Mrs. James Conway of Danvers; Mrs. Avon Bradeen and Mrs. E. J. Ready of Hamilton; Mrs. Roger Clapp and Mrs. Charles Carroll of Middleton; and Mrs. Forrest Southwick and Mrs. E. B. Brewster of West Peabody.

The communities of South Groveland and Newbury have also organized groups for this work.

PROJECT LEADERS MAKE FINE SHOWING

During the month of October, 50 community project leaders have given instruction to 322 women in children's clothes, garment finishes, and furniture renovation. These women have the real extension spirit of service.

Fourteen out of twenty-one members of the Essex County Dairy Herd Improvement Association during 1927 used Eastern States Farmers' Exchange Feeds of open formula.

COUNTY AGENT NOTES

Andrew Longfellow, Groveland, has two very successful fields of alfalfa. He says he has secured three cuttings from a two-year-old field this year.

A. G. Sheldon, Superintendent of the Saugus Town Farm, has the barn completed and a herd of fine cattle installed. He plans to raise his calves on dried skim-milk powder. Drop in and see his ventilating system.

Mrs. William A. Wood, Hathorne, Mass., kept careful costs on growing mangels for 1926 and 1927. These cost figures were checked over by Professor Branch, specialist in Farm Management at the Massachusetts Agricultural College, and show for 1926 a total cost per acre of \$149.30, or \$6.22 per ton, and in 1927, \$121.66 per acre, or \$5.07 per ton.

New members of the Essex County Herd Improvement Association are: Kimball Ayrshire Dairy, East Haverhill, F. M. Donovan, Andover, and Clover Leaf Farm, Andover.

C. A. Stephens, Methuen, topdressed his alfalfa last spring with 300 lbs. of 5-8-7 after first cutting. He got three cuttings this year. Thinks it great.

A. Briscoe, Groveland, had five trays of nice apples in the fruit show at the Topsfield Fair. He held a pruning demonstration last spring.

George Kinney, Amesbury, has joined the 300 Bushel Potato Club and says he is going to give the boys a run for their money.

Sidney Batchelder, Andover, has a tested herd free from tuberculosis, and he, himself, has a clean bill of health. His retail milk customers say they like clean, safe milk in the pure, raw state.

A recent consumer survey of the 901 milk patrons in the town of Rockport showed 39 replies. Of these 65 per cent desired cleaner and safer milk and are willing to pay more for it if necessary. Twenty-five per cent said their milk was satisfactory, and 10 per cent were not interested. This is part of a movement for better milk.

Arthur L. Basiliere, Merrimac, won blue ribbons on his Rhode Island Red pullets at the Merrimac Grange Fair. He is a beginner in the poultry game and is to be congratulated.

MOSQUITOES

God made the star-hung skies for us,
And singing trees and hills and lakes.

Of course He made mosquitoes too—
But everybody makes mistakes.

—Cheerful Cherub.

Whoever said women are poor losers certainly wasn't talking about weight.
—Ogden Standard-Examiner.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 9

HATHORNE, MASS, NOVEMBER, 1928

NO. 11

PEABODY AND LYNN SHORT UNIT COURSES IN FLOWER GARDENING

November sees the closing of the project season for the forty Peabody, Lynn and Swampscott women and men who enrolled last January and February in short unit courses in flower gardening, conducted by Mr. H. Linwood White, Instructor in Floriculture at the School.

Ten lessons were offered covering every phase of home flower gardening, from home grounds designing to the sowing of seed. Seven lessons were given at the Peabody City Hall and at the Lynn Public Library, and three were given at the School greenhouse, where the students donned frocks and aprons, and sowed seeds, transplanted seedlings and studied soils and soil mixtures.

The ten lessons were supplemented through the season by visits from the instructor. Thus, individual gardens and home grounds problems were worked out, and many changes made or decided upon. The gardens ranged in size from the "pocket handkerchief sort to extensive layouts, but all

were worked by the student and family, with occasional outside help for the heavier operations.

The short unit course in home flower gardening is offered with the sanction and support of the State Department of Education and, in Essex County is conducted by the School. Enrollment is open to men and women who want to improve their knowledge of, and skill in, home grounds education. Classes are limited to twenty members, and about that number should be enrolled at time of starting the lessons. Further particulars concerning such courses may be obtained from Director Fred A. Smith, Essex County Agricultural School, Hathorne, Mass.

—H. L. White.

1918 REUNION

The Class of 1918 will hold a reunion at the School on the evening of November 27, following the graduation exercises. A committee of the Class, with G. Stewart Barnaby as chairman, has completed arrangements and a large number of the Class is expected to return to take part in the festivities.

WORLD FARM CENSUS PLANNED

Plans for the first international census of agriculture ever taken, are practically complete, according to Leon M. Estabrook, director of the census, who recently visited Washington to make arrangements for the work in the United States. The census will be conducted in over 200 countries under the auspices of the International Institute of Agriculture at Rome. The figures to be compiled will give the number and size of farms, the area and production of important crops, and the number of each kind of livestock by age and sex classifications, for every farm in the countries co-operating. The census will be taken during 1929 and 1930, and the results are expected to be compiled and published in 1931 and 1932. Each country will take the census with its own organization and methods, following a standard form furnished by the Institute of Agriculture.



SENIOR CLASS, 1928

First Row—Hale, H. B. Rogers, Finocchio, Tattersall, H. S. Rogers, Mooers, Gould, Dawkins, Pasukonis.
Second Row—Mr. Stearns, E. Jordan, H. Lendall, Brown, E. Perkins, Wilson, A. Perkins, Baillie, M. Walton, Smith, A. DeCraney, Mrs. Clapp.
Third Row—Usley, D. Burrill, E. Ro s, I. Miller, F. Lawson, T. Coleman, M. Russell, M. Foster, L. Vance, E. Philbrick, G. Lynch, G. Stanley, H. Andrews, A. P. Henderson, Emerson.
Fourth Row—Rennie, Perrault, Danforth, G. Smallwood, E. Emmert, M. Dawson, R. Hurley, H. Flynn, R. Graves, E. Keogh, M. Keyes, Marston, R. Gould, Corner.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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CALENDAR

November 27—Graduation Day.
November 27—Alumni Association Reunion.
November 27—Reunion of Class of 1918.
November 28 to Dec. 1—Thanksgiving Recess.
December 19—Christmas Recess begins.
January 2, 1929—School Sessions Reopened.

GRADUATION

The stage is all arranged for the graduation of another fine class. On November 27th at 2:30 P. M., appropriate exercises will be held, culminating in the issuing of diplomas to forty-six graduates.

There is a great deal of satisfaction in the minds of Trustees, Advisory Boards, and Faculty when another good class has been added to our list of graduates. The feeling of satisfaction comes when we think of so many fine young persons prepared for and fitted to take up their valuable life work.

We note with considerable interest and approval that the first ten-year class reunion will be held this year simultaneously with the Alumni gathering. It is to be hoped that this reunion will be a great success and that it will establish a custom for other classes to follow.

SHORT UNIT CLASSES

The Trustees are more and more enthusiastic over the results obtained in the Short Unit Classes. Adults are responding to this offer of class instruction in a very hearty manner. Thus far, courses in floriculture,

poultry, and ornamental gardening have been offered. The School is prepared to continue these and to offer additional subjects if interest demands.

It would seem that there is no better way to invest the time, money and energy of this School when it gives such an immediate result and return expressed either in money values or satisfaction. Anyone interested to learn more about this work is cordially invited to address

The Director

Essex County Agricultural School,
Hathorne, Massachusetts.

ALUMNI NOTES

George Stickney, '26, is employed on the Chevovki Farm, in Wiscasset, Maine.

Aubrey Vaughan, '26, is employed as herdsman on the Wyman Farm, in Winthrop, Maine.

James Rogers, '21, and Andrew Baillie, of the 1928 class, have charge of the poultry on the same farm.

Harold Wolfram, '24, is working on the Crane Estate, Ipswich.

Philip Lee, '21, is located on a poultry farm in Waldoboro, Maine.

James Curran, '24, Nathan Hale, '28, William Brown, '28, and Nathan Lassman, ex-'29, are all registered at M. A. C. for further agricultural education.

Frederick Walker, '27, has gone to the Kansas State College, entering for further study in entomology.

George Sargent, '24, married Miss Marie Gallant on June 20th, and they are living at 106 Salem St., Reading.

Edward Whalen, '20, was married to Miss Mae McAuley in September. They now live on Chestnut Street, Danvers.

Elmer Demeritt, a former student of the School, was married recently and now lives in Wiscasset, Maine.

Ruth Erickson, '26, was married in July.

Ruby Esty, '22, was married in September.

Emma Rix, '25, and Harold J. Arthur of Beverly, were married this month. They will live at 33 Bates Street, Danvers.

Margaret Foster, '28, and Luther Martin, '16, were married during the summer, and are now living at 22 Pond St., Marblehead.

Stuart Cogswell, '26, and Marjorie Hawkes, '26, were married in May, and are now residing in Wenham.

Evan Roberts, '24, married Miss Mina Ingraham in April.

Clarence Tibbetts, '27, and Doris Garland, '25, were married September 16, 1928.

Winslow Dunnells, '23, was married on September 22nd to Miss Emily Balcom of North Andover.

C. Stewart Barnaby, '18, is now conducting a florist business of his own at 11 Harvard St., Brookline, Mass.

Hugh Parkhurst, '24, owner of Edgewood Poultry Farm, Essex Ave., Gloucester, was a recent visitor to the School. He is married and has one daughter, Marjorie R., age 2½ years.

Wendall Wright, '28, was married on October 22nd, to Miss Linda Katzschan of Easthampton.

Maynard Brown, '24, of Danvers, was a recent visitor to the School.

Roland Perley, '18, of Rowley, is employed by the Davey Tree Expert Co., of Kent, Ohio.

Charles P. Lane, Rockport, and Hazen Richardson, Middleton, are two Essex County farmers who grow cranberries outside of the cranberry exchange.

STUDENTS SHOW GREAT INTEREST IN SCIENCE DAY EXHIBITS

The fourth annual Science Day at Essex Aggie was held on Friday, November 9. The program began with singing of "Essex We Cheer Thy Name," by the assembly. Mr. H. A. Mostrom, Educational Manager, spoke to the students on the topic, "What Science Day Has Come to Mean at Essex." Prof. W. G. Whitman, head of the Science Department of the Salem Normal School, was then introduced. Prof. Whitman's topic was "Imagination in Science," and the students were given plenty of opportunity to use their imagination as the speaker related some of the marvelous accomplishments of science in the world today.

The prizes were as follows:

SWEETSTAKE MEDALS.

Robert Moulton, senior, first prize, Gold Medal.

Ernest Magee, senior, second prize, Silver Medal.

Fred Jackman, junior, third prize, Bronze Medal.

PRIZE AWARDS BY CLASSES (Ribbons).
Seniors:

First—Robert Moulton, Lynnfield.

Second—Ernest, Magee, Lynn.

Third—Annie Dickinson, Methuen.

Juniors:

First—Ernest Dickinson, Saugus.

Second—Herbert Kirk, Amesbury.

Third—Aarne Kolhonen, Peabody.

Sophomores:

First—Gertrude Colby, Newbury.

Second—Walter Welch, Lynn.

Third—Elbridge Gerry, Lynnfield.

Freshmen:

First—Loring Clark, Marblehead.

Second—Richard Heider, North Andover.

Third—William Hay, Lawrence.

W. H. Parkin—O. E. Carlson.

PROTECTING FRUIT TREES FROM RODENTS

It is probable that many fruit trees will be girdled by mice this winter. At the present time there are large numbers of mice in the fields and sod orchards, and some of the trees already have been partly or entirely girdled by these rodents.

Probably the best protectors to use are galvanized wire screening, three or four meshes to the inch, copper screening and newspapers. The first is most commonly used and gives general satisfaction. It may be purchased in one-hundred-foot rolls, eighteen inches wide, and cut into one-foot lengths for newly-set trees, and one and one-half foot lengths for older trees. Before wrapping the tree with the protector, all the turf and mulch material should be hoed away from the trunk of the tree; then bury the protector about an inch in the soil. If copper wire or galvanized wire is used to fasten the guard around the tree, it will last for many years with only an annual inspection and loosening to allow diameter growth of the trunks.

If any trees are found to be gnawed the wound should be immediately covered with grafting wax, in order to prevent drying out and subsequent death of surrounding tissue. In the early spring, just before growth starts, wounded trees should be bridge-grafted, in order to restore the connection between the roots and top of the tree.

Poisoning the mice has been found to be an effective way to eliminate much of the danger of injury. Farmer's Bulletin No. 1397 carries full directions for control of mice by this method.

—C. M. Wood.

M. A. C. RADIO FORUM STARTS WINTER PROGRAM

Plans and schedule for the regular winter radio forum of the Massachusetts Agricultural College over Westinghouse stations WBZ and WRZA, are practically complete. W. R. Cole, in charge of radio work at the college, announced recently, the time allotted to the forum this year being Mondays at 12.30 p. m.

George L. Farley, state leader of 4-H Club work in Massachusetts, opened the forum on Monday, November 19. The forum this year will be in the form of a dialogue, the plan being to have a homemaker, a farmer, or some other person appear at the studio and ask the speaker from the college questions which will be answered extemporaneously. The two weeks following Mr. Farley will be in charge of H. B. Rowe, extension specialist in agricultural economics,

and Mrs. A. T. Herr, state home demonstration leader of the extension service.

Complete schedules may be obtained from W. R. Cole, French Hall, M. A. C., Amherst, Mass.

The schedule for the forum until January 14 includes, in addition to the three speakers mentioned, R. B. Parmenter, December 10; a poultry talk, December 17; junior extension talks December 24 and 31; W. R. Cole on home canning, January 7; and Mrs. Harriet J. Haynes on home management, January 14.

The broadcast runs until June 24, 1929. Ten dates will be devoted to home economics, five to club work, thirteen to agricultural projects, and five to miscellaneous.

—Extension Editor, M. A. C.

VEGETABLE JUDGING MEETING

On November 8th a group of the instructors at the Essex County Agricultural School met with Prof. Grant Snyder, from M. A. C., Amherst, to talk over the standardizing of types and varieties of vegetables for judging. Rules for judging contests in Massachusetts were also gone over, in order to have a better understanding of the requirements of our students in inter-school affairs.

In addition to several instructors of this School, Mr. Dempsey of the Experiment Station at Waltham, Mr. H. Wheeler of Reading, and Mr. A. Love of Worcester, were present.

—C. M. Stearns.

4-H CLUB LEADERS' RALLY

The local leaders of Essex County 4-H Clubs met at the School on November 17 for an all-day meeting with County Club Agent R. B. Ewing in charge. After an address of welcome by Director Smith, plans for the coming year were given by the three agents in Extension Work. Miss Helen E. Doane of M. A. C. gave reasons and methods for developing the Health II in club meetings. Several members spoke of their experiences at 4-H Club camps. During the afternoon, sectional meetings were held in Clothing, Food, Agriculture, and Forestry.

NEW AND RECENT BULLETINS

Utah Agricultural Experiment Station, Logan, Utah, Bulletin No. 207, "The Physical Curd Character of Milk and Its Relationship to the Digestibility and Food Value of Milk for Infants," by R. L. Hill.

Cornell Extension Bulletin No. 171, "Combating Diseases of Vegetables,"

by Dr. Charles Chapp, New York State College of Agriculture, Ithaca, New York.

Station Circular No. 27 New Hampshire Agricultural Experiment Station, Durham, New Hampshire, "Coccidiosis in Chickens," by Dr. E. M. Gildow and Walter Wisnicky.

"The New England Seven," circular issued by Extension Services of the Agricultural Colleges of New England.

"Types of Farming Areas in Massachusetts," Massachusetts Agricultural Experiment Station Bulletin No. 244, Amherst.

"Washing Powders for Dairy Use," Technical Bulletin No. 13, Massachusetts Agricultural Station, Amherst.

"The Extraction of Apple Juices in the Manufacture of Jelly," Technical Bulletin No. 15, Massachusetts Agricultural Experiment Station, Amherst.

"Cutaneous Immunity in Relation to Contagious Epithelioma, or Chicken Pox," Technical Bulletin No. 14, Massachusetts Agricultural Experiment Station.

"The McIntosh Apple on the New York Market," Bulletin No. 243, Massachusetts Agricultural Experiment Station.

SCHOOL HERD REMAINS ON ACCREDITED LIST

Dr. Aldrich, veterinarian for the U. S. D. A., has again given the tuberculosis test to the animals in the School herd, with the result that the herd will remain on the accredited list. Instructor Eastwood, in charge of the Dairy at the School, is gratified at the result of the test and is determined to keep the herd in the best possible condition for the production of clean, pure milk.

FOOTBALL, 1928

With a string of victories to its credit, the 1928 football squad is looking forward to its final game with Holten High on Thanksgiving Day morning, at the Danvers Park. This game, the second to be played on the home grounds this season, will draw a large number of students and alumni.

Coach Coughig's team has the following record to date:

		Aggie, Opp.	
Oct. 5	At Peabody	0	0
Oct. 12	At Swampscott	8	34
Oct. 20	At Manchester	45	0
Oct. 27	Wilmington	31	7
	at Danvers		
Nov. 3	At Saugus	35	6
Nov. 10	At Stoneham	2	0
Nov. 17	At Salem, N. H.	6	6

A LOOK AHEAD AT THE WOMEN'S EXTENSION PROGRAM

NUTRITION

Now that our groups in Clothing, Home Nursing, and Furniture Renovation are well started, plans are in the making for organizing groups in Home Improvement and in county-wide meetings in Child Feeding.

Miss Foley, State Nutrition Specialist, will conduct two groups for training leaders in Child Feeding, beginning in January. The Home Demonstration Agent will conduct similar groups. This project consists of two meetings.

Tentative plans are being made for one training conference to be held in the northern part of the county another in the western part, and a third in the southern part. By this method, mothers from several sections of the county may participate.

More definite plans will be given in the December issue of this paper.

HOME IMPROVEMENT

The homelike living room and the convenient and attractive kitchen will be the theme of the Home Improvement work carried on during the winter and spring, and conducted by the Home Demonstration Agent.

Already several communities have enrolled in the projects. An effort will be made in these groups to tie up with the Better Homes in America Movement.

EXTENSION PROJECTS CARRIED ON IN NOVEMBER

Amesbury—Garment Finishes, Salisbury—Garment Finishes, West Newbury—Child Guidance, Newbury—Garment Finishes; Furniture Renovation.
Riverside (Haverhill)—Home Nursing, Groveland—Chair Caning; Millinery, So. Groveland—Furniture Renovation, Georgetown—Garment Finishes, No. Andover—Garment Finishes; Furniture Renovation; Home Nursing.
Ipswich—Children's Clothes; Home Nursing.
Danielsville (Rowley)—Home Nursing.
Hamilton-Wenham—Furniture Renovation.
Essex—Children's Clothes, Beverly—Children's Clothes; Furniture Renovation.
Middleton—Furniture Renovation; Garment Finishes; Children's Clothes.
Peabody—Millinery; Home Nursing; Kitchen Improvement; Furniture Renovation.
Danvers—Furniture Renovation; Garment Finishes.

Mrs. Annette T. Herr, State Leader, is conducting the group in Child Guidance; Miss Crawford, Kitchen Improvement Project; Miss Esther B. Cooley, State Clothing Specialist, and Mrs. Mary McIntire are training leaders in Garment Finishes. Mrs. Harriet T. Haynes, Home Management Specialist, is training leaders in Furniture Renovation. Forty-five project leaders are assisting in carrying on the above projects.

MAKE GIRLS' SCHOOL DRESSES SIMPLE AND EASY TO LAUNDRY

Possibly no task gives a mother more real enjoyment than selecting or making the dresses worn by her small daughter when she is between three or four and ten. Sometimes the mother feels herself once more like a little girl with a doll to dress, and she takes so much pleasure in planning her "doll's" wardrobe that she allows her imagination to run riot. The little girl, too, has ideas about frills and ruffles and fancy decorations she has seen on other children's clothes. The result is often an elaborate, overtrimmed, impractical set of dresses, which not only give much work in the making but also in "doing up."

Dresses that are too fussy or too fragile for everyday wear prevent a child from indulging in normal active play, and make her too conscious of herself and her appearance; or else they are soon dirty and dragged and much less pleasant to look at than plain, sturdy play suits. Another unfortunate point, too, is that the frocks that make a little girl look like a dressed-up doll are not really in good taste except for "dress-up" occasions. If worn to school the child is likely to be criticised rather than admired.

The Bureau of Home Economics, United States Department of Agriculture, has been interested in designing dresses for the little girl that can be easily made and laundered, that are comfortable to wear, pleasing to look at, and easy to put on and take off. Even a three-year-old can learn to dress herself, if the fastenings are few in number, with large, findable buttons placed in front. It is not necessary to choose dull, uninteresting colors, for there are many gay, fast-colored cotton prints available that appeal to any little girl. In winter-time they may be replaced by warm, washable challies in similar designs. Plain colors, too, are good in such materials as broadcloth or poplin.—*U. S. Dept. of Agriculture.*

Do not be afraid of going slowly; rather be afraid of standing still.

HOMEMAKING DEPARTMENT HOST TO SEVERAL COUNTY ORGANIZATIONS

The Homemaking Department entertained several groups from all parts of the County during September and October. On September 27th luncheon was served to thirty-two members of the Marblehead Rotary Club.

On October 9th, the Literature Committee of the Danvers Woman's Association held its first meeting at the School, and tea was served to twenty-five ladies. Souvenirs in the form of book lists, with appropriate covers, were presented to each lady.

On October 16th twenty-five Kivans from Lynn had luncheon at the School.

On October 17th refreshments were served to twenty boys from the Norfolk County Agricultural School, who were at the School for a track meet.

ARMISTICE DAY PROGRAM

Armistice Day was fittingly observed in both departments of the School. In the Homemaking Department the following program was carried out by members of the Freshman Class on Thursday, November 8:—

- I. Songs by entire School:
"Till We Meet Again."
"Pack Up Your Troubles."
- II. Recitations:
"In Flanders Fields," and "The Answer," by Theoda Day of Saugus and Elizabeth Nash of Peabody.
- III. Songs by entire School:
"The Long, Long Trail."
"The Perfect Day."
- IV. One-act play, "Preparing a Lesson for Citizenship."
Time—The present.
Place—Here.
Characters—Three Essex Aggie Homemakers: Linna Carroll of Merrimack, Bessie Manchester of No. Andover, Adelaide O'Brien of Saugus.
- V. Song by School:
"Keep the Home Fires Burning."
- VI. Record of the E. C. A. S. students who died in, or as a result of the World War.
- VII. School:
1. Flag Pledge.
2. The Star-Spangled Banner.

In the Agricultural Department the following program was given on Friday, November 9:

- Song, "Long, Long Trail."
- Flag Salute.
- "Armistice Day in France, 1918," Instructor Stearns.
- Reading, "In Flanders Fields," Instructor Gifford.
- Roll of Honor, Instructor Thurlow.
- "America."

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HATHORNE, MASS., DECEMBER, 1928

NO. 12

JOSEPH N. DUMMER, LECTURER OF ESSEX POMONA, SPEAKS TO GRANGERS

The Grange stands for better agriculture, better homes, better civic life, better community spirit, in fact, nothing is too good for a patron.

Every patron, in city or country, is interested in agriculture. Every bit of our food, excepting fish, comes from the brown soil, produced through the art of agriculture. We should be and we are interested in this basic industry. We must do our utmost to see that our food is of the best quality, sufficient in quantity, put up cleanly, and brought to us as expeditiously as possible. That is our work.

In addition to food, all our clothing comes from either plant or animal sources. Leather is used in many ways and timber for our houses are all parts of the basic industry, agriculture.

The raising of ornamental trees, shrubs and plants, pet stock, flowers in house or gardens, are all branches of agriculture.

There are many things which affect our lives, our government, and the functions of its various departments. The development of community interests, expanding the spirit of goodwill, training our youth, promoting the love of nature, all the things which enlighten our minds, refine our tastes, expand and improve our affections, are of keen interest to us, and these latter things should be presented in our grange programs in the literary hour.

PROMOTION OF AGRICULTURE

Yes, but how are we to study agriculture? Agriculture, in some of its various branches should be given a place on the program. We have a committee for the promotion of agriculture, but its duties have never been formulated. It has never functioned. I am asked each month to report its activities, but I have never reported.

There should be a similar committee in each subordinate grange. This committee should study the conditions in their community. If you have a group of men and women interested in poultry, every one of this group should be put in touch with the best conditions for raising poultry, so that robust, healthy strains of poultry may be produced and these products



HOME MANAGEMENT DEMONSTRATION, BETTER HOMES DAY, JUNE, 1925
County women demonstrating chair caning, and painting of kitchen equipment

put on the market in the most attractive way, that not only may the producer have a satisfactory income, but that you in your homes may receive better poultry and eggs for your table. *That's Grange work.*

EXTENSION WORK

Groups may also be formed of those interested in dairying, fruit growing, gardening, floriculture, or any other branch of agriculture. The latest scientific information may be had along any of these lines by calling on the County Agent or the Extension Service of the School or the Massachusetts Agricultural College.

Agriculture is diversified as you see, and for the sake of business, for our lives' sake, let's get the best. It is possible for each group I have mentioned to get in touch with the best help in their line.

COUNTY AGENT

When the Committee on Promotion of Agriculture in your grange has found out what groups are working in your community or town, then get in touch with your County Agent and tell him that you have a group of twelve or more interested in poultry, dairy, fruit or vegetables, and that you would like to have him arrange with you for a meeting, or a course of several meetings, to study the problems of that group. Tell him that you want experts from M. A. C. or the Essex County Agricultural School or elsewhere, to bring their best advice. This has been done in the past, in a small way, outside of the grange. Now we are the only

agricultural organization in the field and the County Agent is looking to us. Now then, let the grange get back of this and show that we are an agricultural society. Appoint the committee, find the group desiring help or suggestions. Interest the entire town, not merely grange members. When you have accomplished something with your group, have an open meeting of the grange and acquaint the entire town with what is being done. Let every grange sponsor the work in their town.

The County Agent is ready to work with your committee. Work him for all he is worth.

HOME ECONOMICS

Each grange has a committee on Home Economics which can bring to the women of their communities the best ideas on nutrition, care of clothing, home conveniences, and many other things touching home life.

Let our Pomona and every grange this year take such strides in the science and art of Agriculture that it will be hard for other Pomonas to catch up with us. I make the motion that this Pomona recommend that each of our subordinate granges appoint a committee of three for the Promotion of Agriculture, and that our Committee on Promotion of Agriculture unite with and encourage the subordinate granges as far as possible.

Joseph N. Dummer,

Lecturer of Essex Pomona.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.
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M. P. CRAWFORD, Home Demonstration Agent
R. B. EWING, County Club Agent

CALENDAR

- December 19—Christmas recess begins.
January 2—School re-opens.
January 1-4—Boston Poultry Show.
February 20—Chebacco Pomona Mid-Winter Field Meeting.
March 12—Farmers' and Homemakers' Day.

EDITORIAL

At the last Graduation, in his speech as salutatorian, Peter Pasukonis referred to his former employer's methods, as he learned them while working there during a summer project. He said: "It was the owners' idea to get as much out of an acre of land as possible, to put back as much as possible, and at the same time to keep the bank account growing as fast as possible." We wonder if that single sentence isn't the best statement of the aim in farming today? Even the most casual observer would conclude that the members of this graduation class were prepared to make this proposal come true.

GRADUATION

The Class of 1928 held their graduation in the Assembly Hall of the Main Building, November 27, 1928. The exercises consisted of selections by the School Orchestra and Glee Club and three interesting essays from the students of the graduating class, namely: "The Story of My Projects," Peter M. Pasukonis, Rowley; "Merchandising, the Major Problem of Agriculture," Nathan S. Hale, Rowley; "The Highway of Life," Esther Perkins, Newburyport.

An interesting part of the program was the awarding of the prizes by Director Smith. The results were as follows:

BAUER PRIZE WINNERS

Agriculture

1. James Forrest, Methuen.
2. Robert Moulton, Lynnfield Centre.
3. Robert Winkley, Newburyport.
4. Robert Ellis, Lexington.
5. Roger Peabody, Boxford.

Homemaking

1. Viola Messer, Methuen.
2. Alice DeCraney, Lynn.
3. Mildred Russell, Danvers.
4. Ruth Hurley, Lawrence.
5. S. Eleanor Keogh, Amesbury.

ENDICOTT PRIZE WINNERS

1. Arthur Gordon, Rowley.
2. Stanley Chlebowski, Andover.
3. John Rannels, Lynn.
4. G. Ernest Magee, Jr., Lynn.
5. Edward Batchelder, Cliftondale.
6. Elbridge Gerry, Lynnfield Centre.
7. Wallace Corner, Jr., Essex.

ALUMNI PRIZE WINNERS

Agriculture

- A. Porter Henderson, Haverhill.

Homemaking

- Evelyn Hudson, Lawrence.

KRASKER MEDALS

Agriculture

- Nathan Hale, Rowley.

Homemaking

- Mildred Russell, Danvers.

The graduates were presented their diplomas by Mayor R. S. Bauer, President of the Board of Trustees.

The address to the graduates was made by the Rev. Garfield Morgan of Lynn.

CHRISTMAS PARTY

"Horace Abbott—Letter Man," is the title of a play presented by members of the Senior Class at the Christmas Party on December 19. The Senior Class, following the established custom, acted as host to the student body on this occasion.

The play portrays the story of an athletic young man and his sister, who, being orphans, live in a Massachusetts country town with their grandparents. The young man, Horace Abbott, believes agriculture to be a respectable type of life work, and he persists in securing agricultural training at the County School in spite of ridicule from his less serious-minded companions.

A sympathetic wealthy uncle, his grandmother, his sister, and an understanding young lady encourage him most in realizing his ambition. Among other important accomplishments, Horace eventually wins the "understanding young lady."

—E. E. M.

REUNION—CLASS OF 1918

A very worthwhile and enjoyable get-together of the Aggie Class of 1918, was held the evening of November 27, in the Homemaking Building of the School, along with the annual Alumni Banquet. A special table, beautifully decorated by a class of Homemaking young ladies, under the direction of Miss Harris, teacher of Art, was occupied by the group. Novelty hats and favors played their part in brightening up the event. Friendships were renewed and it was very evident that many of the 1918 alumni were anxious to return to the School on this occasion.

Now that the 1918 Class has started the reunion idea, we believe it a very worthwhile custom for other classes to follow.

Those present at the 1918 reunion were as follows:

Miss Hope Cook, Haverhill.
Miss Mabel Curtis, Salem.
Philip Tarr, Gloucester.
Earle Grant and wife, Beverly.
Leonard Russell, Danvers.
Ralph Putnam and wife, Danvers.
Gordon Woodberry and wife, Danvers.

Ernest A. Howard and wife Haverhill.

Mrs. Gilbert Tucker (Evelyn Bodge) West Newbury.

Stewart Barnaby, Brookline.
Horton D. Bradstreet, Methuen.
Franklin Roberts, former English instructor at Aggie, now instructor at Boston University, and

S. Lothrop Davenport, former Fruit instructor, now Fruit and Floriculture Specialist, were special guests, and both gave interesting talks.

Miss Margaret Nichols, former teacher in the Homemaking Department,

Miss Lucinda Bousley, '16, now part-time teacher of nursing in the Homemaking Department, and

Miss Blanche Burnham, '19, now dietitian at State Hospital, were also special guests at the table.

—E. A. Howard.

RADIO FORUM

The M. A. C. Radio Forum over stations WEZ and WEBA, which was announced as 12.30 p. m., has been changed to 6.15 p. m. on Monday evenings, according to an announcement by W. R. Cole of the College.

The new time is by courtesy of the United States Department of Agriculture and the departments of agriculture from the six New England states. Complete programs may be secured from Mr. Cole, French Hall, M. A. C., Amherst, Mass.

CONCERNING ROADSIDE STANDS

Unwarranted prices charged by roadside stands are among the chief complaints in the reports of consumers sent in to the Department of Agriculture as part of the general investigation of the roadside stand situation, which has been in progress the past few weeks. In a considerable proportion of the answers to the general consumer questionnaire there are numerous statements that the prices charged out in the country are as high or higher than are charged by stores in the city. The quality of the roadside stand product might be altogether satisfactory, but the price seems to these consumers to be so high as to deter them from buying freely at the roadside stands.

Quality as well as price comes in for considerable criticism. There are a good many claims of cold storage eggs or eggs from a distance being sold as a fresh native product. Fruit and vegetables out of season in this region are claimed to have been sold at roadside stands as locally grown. In a large proportion of these cases it is probable that the patron was not told definitely that the eggs, the fruit, or the vegetables were fresh from nearby farms, but the buyer was allowed to infer it from the fact that the stand was in the country.

It seems probable that while the majority of the roadside stands may be giving a real service, in quality and in price, there are a small number which are discrediting the whole movement. The fact that most of the better class of stands report that their business is increasing and that from 50 to 90 per cent of their trade is from regular customers, indicates that these stands at least are giving their patrons good quality and fair prices.

—Mass. D. of A.

ESSEX RANKS HIGH IN POULTRY CONTEST

In the State Egg Laying Contest, conducted by the Department of Farm Management at Massachusetts Agricultural College, Essex County poultrymen secured very good positions, eight placements out of a possible twenty-eight.

In the large flock class, Homer Rowell, Groveland, won second position, flocks over 1,000 birds, with an average production of 182.2 eggs. William P. Foster, Andover, earned sixth place, with 162.5 eggs. In the medium large flock, 500 to 999 birds, A. S. Pendleton, Andover, won second

place with 183.6 eggs per bird. In the small medium flock, 90 to 499 birds, Robert Parkhurst, Boxford, won fifth place with 190.4 egg average.

The small flock owners did even better. Flocks under 90 birds, first, John P. Bunker, Beverly, 189.7 eggs; second, Hartwell B. Reid, Amesbury, 189.4 eggs; third, Stanley Roach, Lynn, 181.3 eggs; fifth, Fredwin Stanley, Beverly, with 178.9 eggs.

—F. C. Smith.

UNIT POULTRY COURSE CLOSES WITH EIGHTEEN MEMBERS

The twentieth or final lesson in the Unit Poultry Course, generally spoken of as the Evening Poultry Course for Adults, was given December 13, 1928.

Of the twenty people who originally enrolled, only two dropped out. The names of those completing the evenings attendance are as follows: Gordon A. Abbott, West Peabody; A. A. Abbott, West Peabody; George Busineau, Saugus; William Chapman, Malden; Kenneth Greenleaf, Saugus; R. M. Haynes, Danvers; Edward G. Hull, Ipswich; James E. McPoland, Danvers; Henry Martin, Beverly; Melvin P. Reed, Malden; W. G. Schrupp, Saugus; Edward Scott, Cliftondale; Grover M. Stevens, Rowley; Ambrose Tart, Methuen; Peter F. Terry, Beverly; Harold Waitt, Saugus; Ernest E. Wall, Newburyport; Hilmer Soderberg, Cliftondale.

Projects will be carried on and accurate accounts kept by all enrolled in the course. Already several members of the class have commercialized projects, and several others intend to enlarge their plants.

During the twenty lessons, aside from lectures and round table discussions, there were practicals in judging and culling hens, posting birds to determine disease, killing and dressing, setting eggs in incubator, testing out eggs on seventh and fourteenth days, preparing and disinfecting brooders.

Among the matters taken up were some principles of breeding, culling for egg production, with stress given to the correlation between time of egg-laying and start of molt, composition and figuring rations, especially with reference to unit values, discussion on vitamins and of various types of incubators and brooders, types and plans of laying houses, and comparison of utility egg-laying breeds.

—F. L. Edwards.

4-H CLUB MILK PRODUCTION CONTEST

This contest began December 1 and continues for one year. Fifteen milking cows have been entered and it looks as if fifteen more would be entered before January 1, 1929.

As it is the first time that such a contest has been held in this county for 4-H Dairy members, the winners for December are being looked forward to with a great deal of interest.

A sample of each cow's milk will be taken and tested at the School. The results will be tabulated and sent out to each member in the contest.

The following prizes will be awarded:

Monthly (County) Prizes

1. One bag of Wirthmore Dairy Feed offered to the 4-H Club member whose cow gives the largest amount of milk for the month. Milk below standard (3.35) will not be eligible for these prizes.

2. One bag to the 4-H Club member whose cow shows the highest per cent butter fat for the month.

Monthly (State) Prizes

1. Three prize ribbons offered by the Massachusetts Dairymen's Association to the 4-H Club members whose cows produce the largest amount of butter-fat for the month. No milk below standard (3.35) will be eligible for these ribbons.

Final (State) Prizes

1. Gold, silver and bronze medals (donator announced later).

2. Medals awarded on following basis:

- a. Production of 4% milk—75%.
- b. Record book and monthly reports—25%.

—R. B. Ewing.

SILVER MEDAL HEIFER

The Registry of Merit record of the Wood Farm heifer, "September Morn," completed on October 15, 1928, is well worth mentioning. She is a pure-bred Jersey heifer, No. 754881, fresh at twenty-seven months of age and again bred to freshen at the thirty-eighth month. Her 305 day record, qualifying her for a silver medal with 8,302 pounds milk, 431.65 pounds fat, average test 5.20 fat.

COUNTY AGENT NOTES

Henry Nason, West Boxford, secured the highest egg record in the 4-H Club state-wide contest for 1928. His flock laid an average of 167 eggs per bird.

Gertrude Colby, Newbury, last year's 4-H Club Poultry Champion, has fixed up the upper part of her barn to hold 150 birds, at a cost of \$10.

PLANS FOR THE SPRING OF 1929

Spring fabrics are in our store windows and spring plans for projects are being made by the Home Demonstration Agent.

We are ready to give dates to communities wishing to organize groups in Garment Making, Kitchen Improvement, Living Room Improvement, Home Nursing and Nutrition, including Child Feeding.

As many Town Chairmen have already sent in applications for their communities, we will serve first those who apply first.

If you are interested in any of these subjects you should communicate with your Community Extension Committee or with the Home Demonstration Agent, Essex County Agricultural School, Hathorne.

CHILD FEEDING PROJECT

Every child has a right to be well born, and those who direct the feeding of the child have a responsibility which cannot be overlooked.

Since a child's food is the foundation of his future, and since the choice of that food must not be left to chance, the Essex County Extension Service is offering to young mothers, help in Child Feeding.

Two meetings will be held in this course.

At the first meeting the diet of the young mother and baby will be considered. We all know that the child's health, growth and good nutrition are dependent upon the health and nutrition of his mother before he is born, as well as after birth.

At the second meeting, food for the child from six to twenty is discussed. An opportunity will be given to ask questions and to consider special problems.

Is your child hard to feed?

Who is at fault—child or parent?

How can I know if my child is well nourished?

How can I help my child establish right food habits?

These and many other questions will be considered.

This course will be conducted under community project leaders, who will receive their information from Miss May E. Foley State Nutrition Specialist. Community groups are being formed in towns near North Andover, and on January 17 and February 7 two leaders from each of these groups will meet at the North Andover Health Center for an all-day

meeting with Miss Foley. They will then return to their groups and give back this information.

If you would like to become a member of a group, notify your Town Chairman or Miss Crawford, the County Home Demonstration Agent.

VIOLA MESSER, OF METHUEN 4-H CANNING CLUB, CHAMPION OF ESSEX COUNTY

At the age of seventeen years, when most girls of her age are busy with social ambitions and plans for parties and school dances, Viola Messer, of 237 Pelham Street, Methuen, has walked off with fourteen prizes, half a dozen ribbons, has canned about 400 jars of preserves in one summer, and has directed a club of her friends in putting up close to 1,000 jars.

She is the daughter of Mrs. Gordon Cossar, and is a senior in the Homemaking Department of the Essex Agricultural School. She is the leader of the 4-H Canning Club in her community, and has led children in songs and games to relieve the monotony of the work. To take up her spare moments, of which there were very few during the past summer she made five children's dresses and several articles of clothing for herself. In addition to those attainments she placed continually on the honor roll in school and served on the recommendation committee for two years.

She carried off fourteen prizes at the Topsfield Fair, and took five out of six ribbons at an exhibit in Methuen. Her club consists of fourteen members, three boys and eleven girls. Her coronation at Methuen was recently held, when her record was so far in advance of every other that there was no question of her right to the title. She will be graduated this year from school with more honors, perhaps, than any other student before her, ever received.

—From Lawrence Tribune.

"No other human occupation opens so wide a field for profitable and agreeable combination of labor with cultivated thought as agriculture. Ere long the most valuable of all arts will be the art of deriving a comfortable subsistence from the smallest area of land."—Abraham Lincoln.

"Back to the Soil! Every farmer boy wants to be a school teacher, every school teacher hopes to be an editor, every editor hopes to be a banker, every banker hopes to be a trust magnate, and every trust magnate hopes some day to own a farm and have chickens and cows and pigs and horses to look after. We end where we begin."—O. J. Stevenson, in Country Life Reader.

SCIENCE DAY EXHIBITORS

There were twenty-five exhibitors at the annual Science Day Exhibition held on November 9. The following are the names of those who entered collections for the exhibition:

Seniors

Annie Dickinson of Methuen—Sketches of Poultry and the Anatomy of Fowls.

Ernest Magee of Lynn—Herbarium of Ornamental Plants.

Robert Moulton of Lynnfield—Mountings, pictures, seeds and stores of Forage Crops.

Juniors

Ernest Blaney of Saugus—Herbarium of leaves, wood mounts and explanatory notes.

Fred Jackman of Salisbury—Herbarium of wild flowers.

Herbert Kirk of Amesbury—Herbarium of ornamental shrubs, pictures and explanatory notes.

Aarne Kolhonen of Peabody—Herbarium of ornamental shrubs.

Sophomores

Karl Gardner of Haverhill—Wood mounts.

Elbridge Gerry of Lynnfield—Comprehensive Chart and pictures of Mulch Paper experiments.

Three Year Class

Woodbury Bartlett of Beverly—Sketches of Water Plants.

Gertrude Colby of Newbury—Wood mounts.

Charles Cook of Saugus—Herbarium of weeds and leaves and mounts of insect galls.

Otis Curtis of Gloucester—Herbarium of leaves and weeds.

Alfred Flint of Lynn—Herbarium of leaves and weeds.

Kenward Griffin of Rockport—Herbarium of leaves and weeds and a collection of insect galls.

Wendall Hilton of Danvers—A collection of insect galls.

Robert Waters of Beverly—Herbarium of weeds and leaves and a collection of galls.

Walter Welch of Lynn—Herbarium of leaves and weeds and a collection of galls.

Freshmen

William Chase of Rowley—Herbarium of leaves and weeds.

William Hay of Lawrence—Herbarium of leaves and weeds.

Sidney Batchelder of Andover—Herbarium of leaves and weeds.

Loring Clark of Marblehead—Herbarium of leaves and weeds.

Richard Heider of North Andover—Herbarium of leaves and weeds.

Malcolm Torrey of Newburyport (Homemaking Dept.)—Two booklets of butterfly and moth clippings.

—W. H. Parkin—O. E. Carlson.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 10

HATHORNE, MASS., JANUARY, 1929

NO. 1



This picture was taken by Alfred Flint, of Lynn, a student at this School. Those living in the northern end of the county may recognize it as Powwow River in Amesbury, looking

north from the Powwow Boy Scout Camp. This picture emphasizes the fact that we do not have to go very far from home to get a beautiful landscape scene.

POMONA GRANGE MEETINGS AT HATHORNE, FEB. 20-27

The winter meeting of Essex Pomona Grange will be held at the School on Wednesday, February 20. The regular business meeting will be held in the morning and a speaking program in the afternoon. Following the lunch hour members of the Senior Class will present a play based upon vocational agriculture and written by Instructor Metcalf.

A rally meeting of Grange Lecturers and Masters, and others interested in the work of the order, will be held on Wednesday, February 27. Charles M. Gardner and Angier L. Goodwin will be present to conduct the session. All loyal Grangers should attend.

JUNIOR PROM

The date of the Junior Prom is set for Friday, February 8.

The play "Horace Abbott—Letter Man" will be presented by the Senior Class at the Andover Grange on Thursday evening, February 21, for the benefit of the Educational Aid Fund of the Grange.

UNION AGRICULTURAL MEETINGS AT WORCESTER HELD JAN. 9-11

Several of the Instructors at the Essex County Agricultural School attended the 11th Annual Union Agricultural Meetings, held at Worcester, January 9, 10 and 11. Larger numbers of farmers and those interested in the advance of agriculture attended these meetings this year, and all expressed satisfaction with the valuable remarks made by the speakers on the program.

At the State Vegetable Growers' meeting, Dr. L. H. Flint, U. S. Dept. of Agriculture, Washington, D. C., spoke on "Paper Mulch." He spoke of its origin and present use with the pineapple growers in the Hawaiian Islands. Then he related his experimental work with the paper at Washington, illustrating part of his work with slides. Dr. Flint did not commit himself one way or the other, that paper mulch was profitable to use at the present time.

At the Massachusetts Roadside Stand Association meeting, it was brought out through a survey report by Mr. McCarty of the Division of Markets, that the consumers preferred to patronize attractive and neat roadside market stands where fresh products of quality could be purchased.

—C. M. Stearns.

SHORT UNIT POULTRY COURSE GRADUATED ANOTHER CLASS TUESDAY EVENING JAN. 15, 1929

Nineteen members of the Short Unit Poultry Course received certificates indicating that they had completed a course of twenty-two (22) lectures held at the School and carried on a poultry project for one year, successfully.

Members of the preceding and present poultry classes were their guests to the number of about forty-five.

The speaker of the evening, Professor William C. Monahan, of the Poultry Department, Massachusetts Agricultural College, gave a fine address, laying particular stress upon the individual satisfaction persons can enjoy by living in the country and conducting a successful poultry enterprise.

A former Instructor of this class, Mr. A. W. Doolittle, reminiscenced in a pleasing manner, and Mr. W. B. Moore, of the Poultry Department, urged upon the graduates the fact that they are welcome visitors at the school at any and all times.

Director Smith presented the certificates and at the close of the exercises members of the Homemaking Staff provided refreshments. A list of the graduates follows:

Bennett, Albert G., 38 School St., Saugus Center.
Bunker, John P., 16 Cressy St., Beverly.
Burnett, Mrs. Mary E., Broadway, Saugus.
Cole, Fred L., 77 Locust St., Danvers.
Cressy, Frederick A., 40 Store Court, Beverly.
Daly, Mrs. T. C., Andover Street, North Wilmington.
Downing, George I., 213 Euclid Avenue, Lynn.
Elwell, Albert E., Moulton Street, West Newbury.
Hill, Charles W., 57 Sylvia St., Lynn.
Lundgren, Whitney W., 74 Dodge Street, Beverly.
McCormick, Frederick H., Cherry St., Wenham.
Malbos, Adam A., Broad Street, West Peabody.
Reed, Fred A., 12 Glendale Ave., Peabody.
Reid, Hartwell R., 11 Atlantic Avenue, Amesbury.
Spencer, Harry W., Newbury St., Danvers.
Standley, Fredwin W., 457 Cabot Street, Beverly.
Sturtevant, Ronald F., Dayton Street, Danvers.
Vernott, Albert G., 55 Fairview Avenue, Peabody.

—W. B. Moore.

Farmers' and Homemakers' Day, Wednesday, March 13.

Essex Farmer and Homemaker

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CALENDAR

- January 18—Senior Promenade.
January 19—Boston Market Garden-
ers' Association meeting at the
School.
February 8—Junior Prom.
February 20—Winter Field Meeting
of Chebacco Pomona Grange at
the School.
February 25-March 4—Homemaking
Recess.
February 27—Special Meeting Che-
bacco Pomona Grange at the
School.
March 13—Farmers' and Homemakers'
Day.

NOTE.—The following eulogy, "a
fitting tribute to the life work of the
late George W. Cressy," was prepared
by Director F. A. Smith, and read
by him at the funeral services.

"We have gathered to recognize the
services and pay a fitting tribute to
a friend. What a wonderful record of
service and friendliness his life his-
tory unfolds. A continuous acquaint-
ance since 1893 gives me an oppor-
tunity to speak with considerable
knowledge of the man and his work.

"The greatest monument to his life,
of course, stands right here about us,
in the form of this beautiful park
and this attractive group of buildings.
Succeeding a line of his forbears and
coming to this work as an alert,
sturdy, vigorous young man, it was
most fitting that he was chosen to
carry on this work. Forty-eight years
of continuous service as executive is
a record which few attain. During
this period this place came to be
known as one of the outstanding park
and garden cemeteries of the country.
He took a special pride in collecting,
increasing, disseminating and plant-
ing new and valuable trees, plants
and shrubs at vantage points about
these grounds.

"He was a pioneer in studying the

propagation and cultivation of the
rarer plants, after a manner befitting
a true nature lover. This beautiful
spot, endowed with much by nature,
has been beautified and enhanced by
his ceaseless mind and hand. Perhaps
we are overlooking his most valuable
service, that of meeting and satisfy-
ing the needs, desires and demands of
a rather exacting public.

"Our friend, early recognizing the
value of co-operation, was instrumen-
tal in organizing a National Associa-
tion of Superintendents. As a charter
member he served many times as
officer or committeeman. His pres-
ence yearly in their conventions was
always an occasion for gladness
amongst his contemporaries. Many a
young superintendent owes a debt of
gratitude for helpful suggestions, bits
of experience or advice given to make
his work more effective and valuable.

"Our closest acquaintance and ap-
preciation of our friend has been re-
alized through his services for the
Agricultural School. Appointed to the
Board of Trustees by Governor Foss
in 1912, soon after the passage of the
act creating the school, he was suc-
cessively reappointed for four-year
terms by succeeding governors. Dur-
ing almost this entire period he served
the board as secretary and treasurer.
His was a unique position; experi-
enced in horticulture and agriculture,
having a great fondness for and faith
in boys and girls, schooled in public
affairs and local government, enjoy-
ing a wide acquaintance of influential
friends, fortified by a wide experience
in handling practical problems, is it
to be wondered at that his advice and
counsel became invaluable to the or-
ganization. Both the youth and the

citizen have much to be thankful for
and they may well continue to realize
and be grateful for the work of this
constructive man.

"Our friend exemplified all that was
implied by the word. His connections
with social, fraternal, civic, profes-
sional and religious life have been
many and fruitful. In every environ-
ment he has been a friendly man,
always helpful, constructive and opti-
mistic. Rivalry, jealousy, sham and
destructive influence have had no
place in his life, either in word or
action. It has been a privilege to
know the beauty and charm of his
home and family life.

"In a few short weeks the great
annual transformation will take place
about us. Buds will swell, burst, and
leaves unfold. Birds will return to
their accustomed haunts. The beauty
of flower and fruit will be with us
again. We will not be privileged to
meet George W. Cressy again in these
surroundings, yet his guidance and
masterly influence will help us carry
on."

—From Salem News.

RESIGNATION OF COUNTY CLUB AGENT

Mr. Robert B. Ewing, who has
served the School as County Club
Agent since April 1926, has been of-
fered a similar position in the Ply-
mouth County Extension Service. He
will leave the employ of the School
on January 31st. Mr. Ewing has been
very aggressive in his work and will
take with him the best wishes of
hosts of friends and acquaintances
with whom he has worked while
agent for this County.

SUMMARY OF WEATHER OBSERVATIONS SEPT.-DEC., Inc., 1928

	Sept.	Oct.	Nov.	Dec.
Maximum Temp.	83° (13th)	86° (12th)	72° (17th)	59° (17th)
Minimum Temp.	33° (29th)	22° (30th)	17° (28th)	12° (22-24th)
Ave. Daily Temp.	59.1°	52.0°	41.1°	34.6°
Greatest change in T.	29° (23rd)	38° (12th)	27° (14th)	32° (24th)
Least change in T.	2° (19th)	9° (29th)	4° (8th)	2° (23rd)
Precipitation	5.66"	2.92"	1.50"	3.55"
Boston normal precip.	3.19"	3.05"	3.22"	3.34"
Excess over normal	2.17"	.13" (def.)	1.72" (def.)	.21"
Total for year				42.28"
Boston normal for year				40.53"
Excess over normal for year				1.75"
Ave. relative humidity, 8 a. m.	83.7%	72.8%	75.9%	77.4%
No. days on which rain fell	8	8	12	10
No. clear days	13	18	8	15
Partly cloudy days	8	8	11	7
Cloudy days	9	5	11	9
Total hrs. sunshine	198	232	133	160
Per cent sunshine	52.7%	67.6%	45.3%	56.5%

—H. A. Mostrom.

NEW COUNTY CLUB AGENT

HORACE J. SHUTE APPOINTED
BY TRUSTEES

On January 16th the Trustees appointed Horace J. Shute, of West Newbury, as County Club Agent. He is a graduate of the Essex County Agricultural School in the Class of 1927, and has been connected with agricultural and farm work all his life. Mr. Shute has been a regular and consistent winner in both projects at the School and in 4-H Club contests. He has represented both the School and the County in many judging and demonstration teams. In 1927 Mr. Shute won the Bauer grand prize after having won in the previous contests, a record which had not previously been established. Mr. Shute will commence work at once.

COUNTY AGENT'S ANNUAL
REPORT

The State College, the State Department of Education, and the U. S. Department of Agriculture require the County Agents to submit an annual report of work done. F. C. Smith, of Essex County, recently sent his copy to this paper for our perusal. Some of the outstanding features are given below:

ALFALFA. "A study of records shows a decided trend away from meadow and hay land to red clover, alfalfa, and vegetable gardening." "In order to demonstrate the right methods of growing alfalfa, four carefully planned fields have been seeded this season. The one on the Topsfield Fair Grounds, back of the Cooperative Farming Association Office, will (it is hoped) aid Manager Gaskill in showing his patrons whether to grow Grimm or Northern seed, whether potash is necessary, and whether June, July or August seeding is best. There is, also, a comparison of inoculation and no inoculation, and no lime, with two, four and six ton applications."

W. D. Bragdon and Fred Miller of Methuen, and Louis Bourdelais of Andover have put in fields under the direct supervision of the County Agent.

SILAGE CORN. A test was conducted at the School to determine the relative feeding value of different varieties of silage corn. This work will be continued for another year or two.

The greatest yield (dry weight) was Webber's Early Dent, with 4.8 tons and 16 tons green weight. The improved Leaming and Lancaster Sure Crop were equal in maturity and dry weight. Sweepstakes was a trifle

lower. Certified Cornell No. 11 gave second highest yield in dry weight, had the greatest weight of ears, and was fourth in green weight. It is worth trying.

DAIRYING. Sixteen hundred copies of the Cow Testing Association Report were distributed. This report was printed because the County Agent sold advertising and thus paid for it. It showed that the most profitable ratio of one pound of grain to three pounds of milk. More grain gives more milk but less profit.

POULTRY. Organized the Essex County Turkey Breeders' Association. There are 5,000 turkeys in this county. A fine auto tour was held.

Twenty-four poultrymen kept cost accounts in 1928. Poultry letters were sent to 464 poultrymen. These "Dope sheets" are sent serially and cover opportune poultry suggestions. There was considerable increase in the number of flocks tested for B. W. D.; twelve in 1926, fifteen in 1927, and thirty in fall of 1928.

FRUIT GROWING. Twelve special letters, giving timely information, were sent to 986 persons, as compared to 247 in 1927. There were five motion picture meetings and eight pruning meetings, with an attendance of around 300.

MILK SURVEY. A special study of the competitive milk situation was made in Rockport, Gloucester, and Newburyport areas, and a survey of consumer interest and of milk quality were instituted. Results are beginning to show that good quality, clean, local milk can successfully compete with imported milk.

POTATO CLUB. Nine men entered the contest to grow 300 bushels per acre. One man got third place in the state-wide contest. Everett True, Salisbury, grew 388 bushels.

FARMERS' DAY. About one thousand persons attended the Annual Farmers' Day at Aggie School. The chairmanship of the committee in charge of this program took considerable time.

COMPARISONS

	1923	1926	1927	1928
Farm visits	310	472	782	674
Different farms visited	86	268	515	397
Office calls	180	31	119	182
Phone calls	11	106	227	319
Total meetings	51	35	63	99
Attendance	673	1456	3882	3256
Individual letters written	650	536	1085	1335
Form letters distributed	22635	10634	13144	26841
Total contacts in field (visits and attendance)	1983	1942	4672	4018
Cost per contact	.27	.44	.28	.25

—F. C. Smith,

Agricultural Agent.

DAIRYMAN DOES WELL
WITH COWS

The value of volume of milk produced per cow was appreciated by William Collis, Andover. A year ago December 1 he purchased seven head of pure-bred Holsteins from an accredited herd. Three of these were first calf heifers. They produced \$3,086.99 milk, the total feed cost, including hay and grain, was \$1,641, leaving a return for labor and other overhead of \$1,446. This means these cows have paid expenses and paid for their own cost in one year. Their return was over \$200 each above feed cost. This type of cow is profitable.

The problem of an efficient machine (the cow) with volume (high production), means low cost per unit (quart) and with resultant profits. Herein lies profit for the dairyman.

LEADERS IN COUNTY
POULTRY EGG CONTEST

ELEVEN MONTH PERIOD

	Product Number per bird
J. P. Bunker, Beverly	15 156.3
Hartwell Reid, Amesbury	80 151.4
A. S. Pendleton, Ballardvale	611 172.7
Robert Parkhurst, Boxford	120 172.5
Homer Rowell, Groveland	1292 172.2
In the large commercial flock class Homer Rowell stands in second place in the state; Elm Tree Farm, Plymouth County, holding first place.	

In the medium-sized commercial flock, A. S. Pendleton gets second in the state contest; Arrowhead Farm, Barnstable, wins first.

These flock averages are truly remarkable and show that Essex County poultrymen are among the leaders.

WEATHER SUMMARY FOR 1928

Highest temp. for year 98° on Aug. 4
Coldest temp. for year

4° below, Feb. 26
Average daily temp for 1928 47.9°
Normal daily temp. (Boston) 49.5°
Total rainfall for year 42.28"
Total rainfall for 1927 38.07"
Normal (Boston) 40.53"
Excess over normal 1.75"
Ave. relative humidity, 8 a. m. 73.6%
Rain fell on 130 days
No. clear days 160
No. partly cloudy 92
No. cloudy days 114
Total hours sunshine 2,469
Per cent sunshine 55.3%
Total snowfall 27"

—H. A. Mostrom.

ANNUAL REPORT OF HOME DEMONSTRATION AGENT SHOWS PROGRESS

As we review our Annual Report of 1928, we feel that we would like to have those who worked with us this year know something of the progress shown.

One of the goals set for the year was to develop a better Extension organization. This goal has been partly attained in the organizing of a County Home Economics Extension Committee of ten key women and in the forming of Community Extension Committees of three women in nineteen communities. This does not include the communities still working with a Town Chairman.

We feel that a better balanced program and a county consciousness of Extension ideals has been one gain through these organizations.

Thirteen new communities have been reached during the year.

Much of the growth in the work has been due to the 94 women who have helped to develop our program. Eighty-three of these have acted as leaders and have actually carried the work to the local groups.

Twelve hundred and fifteen women have enrolled in the Extension projects. As usual, the clothing group shows the greatest enrollment. Home management and home nursing show the greatest increase, while nutrition shows a decrease. Child training has made a beginning, having been carried by one group of mothers.

What should be the conclusion reached from this brief summary? Surely there should be interest in some of the more vital problems of home life, such as nutrition of child and adult, and child training. The home—its activities, equipment and conveniences—should hold a larger place in our interests. Will the homemakers of Essex County help us solve some of these problems during 1929?

—M. P. Crawford.

ESSEX AGGIE STUDENTS AGAIN WIN FRUIT JUDGING PRIZES

Two of the five prizes offered by the State Department of Agriculture for excellence in fruit-judging at the Mid-winter Fruit Judging Contest held in Worcester on January 11th, in connection with the Union Agricultural Meetings, were won by students of the Essex County Agricultural School. Roger Peabody, Jr., of Boxford, and Arthur Gordon, Sr., of Rowley, were the students who represented the School and captured the prizes. Although there were thirty contestants, representing five schools, no other school secured two prizes.

—C. M. Wood.

BEVERLY GROUP STUDIES HOME DECORATION

Draperies in the living-room was the subject of the second meeting in Living Room Improvement Project, held in Beverly, January 9.

As the problem of suitable draperies in the living room is one that every homemaker has to consider, this proved to be an interesting subject to the twenty-six women present.

This meeting is illustrated by attractive and inexpensive drapery materials. A miniature window is used to show various ways of having both glass curtains and draperies. Furniture and its arrangement will be the subject of the next meeting, which will be illustrated by stereopticon slides. This course is open to all homemakers.

SALISBURY MAN WINS PRIZE

Everett True of Salisbury won third prize in the form of a ribbon given by the Commissioner of Agriculture for producing 388 bushels of potatoes per acre in a state-wide contest held during 1928. He was thus honored at the Annual Union Agricultural Banquet in the Hotel Bancroft at Worcester last week. Essex County is fortunate in having a local man win such a signal honor.

"BETTER KITCHENS" IN PEABODY

The second meeting in the Kitchen Improvement Course in Peabody, was held in the home of Mrs. H. G. Barnes. The Step-Saving Kitchen versus The Energy-Wasting Kitchen, was the subject of the meeting.

The kitchen of the hostess was scored as to light, ventilation, arrangement of equipment, and attractiveness, etc. The score was higher than the average. We were not surprised when Mrs. Barnes said: "I can't keep my friends out of my kitchen."

Each homemaker is to score her own kitchen before the next meeting. At the last meeting another score will be made to show the result of improvements made.

This group is planning to visit the Priscilla Proving Plant during the Better Homes Week in April.

ALUMNI NOTES

HARTWELL E. REID, a graduate of the Second Short Unit Evening Poultry Class, will be remembered by many of the older graduates. He entered this School with the first class in October, 1913, and left in May, 1916. He has recently bought a 13-acre farm in Amesbury, and is planning to operate it as a poultry farm.

REPORT ON FIRST POULTRY BREEDER'S SCHOOL AT M. A. C.

November 15 to 17, 1928, will go down in poultry history as the beginning of a new era in poultry breeding. For at the Poultry Breeders' School, which I attended, held at the Massachusetts Agricultural College, under the auspices of the Extension Service, fancy breeders and production breeders mutually and sympathetically discussed their breeding problems.

The main purpose of this school, therefore, was to pool our knowledge and make a careful analysis of our findings, so that we might visualize more clearly the idea which we are seeking, and devise ways and means of obtaining it. Discussion was open to all, and each one was to teach what he knew to the others, and he did. The fundamentals of genetics were presented by lecture and picture. The results of research in the field of poultry breeding were graphically described, so that all could understand.

The science of genetics has been known only since 1900, with the rediscovery of Mendel's Law. Prior to that time the basis of all selection for breeding work was Darwinism. It has been a well-known fact among poultrymen for many years that the trapnest method of selecting breeders as a means of improving flocks, gave far from satisfactory results. The knowledge which has been lacking, and is still lacking to most of us, involves the effects of such factors as genes, chromosomes, genotypes and phenotypes.

Dr. H. H. Plough, head of the Science Department of Amherst College, explained to us the importance of these genes in poultry-breeding work. He listed the various genes, starting with the letter A down through the letter M, to give some idea of the number of different factors which entered into the making-up of breeding pens.

This is the first school of its kind that has ever been instituted, so far as known, and by unanimous agreement of the 120 poultry breeders who registered, it is to be an annual event.

—W. B. Moore.

PAUL C. MARSTON

Paul C. Marston, age 22, of Georgetown, and a graduate of Essex Aggie in the class of '27, died on January 3 at the home of Mrs. Alden T. Bartlett, 6 Atlantic avenue, Marblehead. At the time of his death, Paul was caretaker of a private estate at Marblehead Neck.

We, here at the School, knowing his sterling worth, mourn his loss. He leaves his parents, Mr. and Mrs. Moses P. Marston, two brothers and a sister.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 10

LATHORNE, MASS., FEBRUARY, 1929

NO. 2

FARMERS' AND HOMEMAKERS' DAY

WEDNESDAY, MARCH 13, 1929

Following a custom as old as the School itself, the Annual Farmers' and Homemakers' Day will be held again this year. Every effort is being made to hold the best features of previous meetings and add new ones. As usual, a strong feature will be the speakers program, which will consist of a general meeting in the morning from 10:45 to 12:00. Special sectional meetings will be in order in the afternoon from 1:30 to 3:30. These special meetings consist of sections as follows: Homemaking, Dairy and Field Crops, Fruit, Market Gardening, Poultry, Floriculture and Gardening, and Beekeeping. Strong speakers have been secured to lead the thought and discussion in the various sections.

POULTRY AND FRUIT

Poultrymen will be glad to learn that Commissioner Harry E. Lewis, of Rhode Island, will be on the program this year. Local poultrymen have long wished to have him attend one of our sections. The fruit men are equally pleased to know that Prof. George F. Potter, of the Fruit Department of the University of New Hampshire, will speak on the outstanding fruit problem, "Proper Pollination for Our Apple Orchards."

CARE OF LAWNS

Mr. Lawrence Dickinson, of the Massachusetts Agricultural College, will give a talk on the preparation and care of lawns, in a meeting which is to be conducted in the greenhouse head-house. This is an important subject for all people responsible for the care of home grounds or the lawns in public places, and Mr. Dickinson is in a position to give his hearers much valuable help and advice.

DAIRY AND FIELD CROPS

The Dairy and Field Crops section will present several strong speakers well qualified to help our farmers with their problems along these lines.

WOMEN'S SECTION

Mrs. Elsie M. Chamberlain, head of the Chamberlain School of Every Day Art, who has been well accepted by women in this county before, will be the outstanding speaker in the Women's Section.



The School is well equipped with snow removal apparatus, as shown in the picture above. After severe snow storms which we sometimes experience at this time of year, such equipment proves its worth. The illustration shows Business Manager Belcher at the wheel and Leslie Tinkham manning the plow.

TRADE DISPLAY

One of the strong features again this year will be the trade display. The entire lower floor is being assigned to commercial houses covering a wide range of supplies. These dealers will have the best displays and equipment and be prepared to give our guests the very best help.

EDUCATIONAL EXHIBITS

Another valuable phase will be the educational displays and demonstrations, which will be conducted on the main floor of the Agricultural Building and in the Homemaking Building. We believe that much help is given to our visitors through these demonstrations.

THE FARMER'S ARM

Let the wealthy and great
Roll in splendor and state,
I envy them not, I declare it.
I eat my own lamb,
My own chickens and ham,
I shear my own fleece and I wear it.
I have lawns, I have bowers,
I have fruit, I have flowers,
The lark is my morning alarm:
So, my jolly boys now,
Here's God speed the plough,
Long life and success to the farmer.

—A very old bit of English rhyme
from "Perhaps I Am," by
Edward W. Bok, page 346.

GUERNSEY RECORD

Meredith Farm at Topsfield has recently completed a fine advanced register record on the Guernsey cow Rhodonite, of Meredith Farm, No. 177149, amounting to 15,831 lbs. of milk and 809 lbs. of butter fat. Rhodonite started her test at the age of 4½ years. This cow was bred by Meredith Farm and was sired by Mixer Buckhorn 65241, a son of Langwater Fisherman, who, in turn, was a son of King of the May. Her dam is Mixer Vesta Dean 79730, owned by Meredith Farm, whose advanced register record is 18,710 lbs. of milk and 754 lbs. of butter fat, and who is a daughter of Dean of the May. Rhodonite's highest month's production was 1,663 lbs. of milk and 85 lbs. of butter fat. Her average butter fat percentage was over 5. Her record was supervised by the Massachusetts Experiment Station and included three retests and one check test. One daughter, sired by Atamansit Leader 85020, is now in the herd who made a two-year-old record of 10,157 lbs. of milk and 555 lbs. of butter fat. Two sons have been sold, one going to Maine and the other to New York.

—F. C. S.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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CALENDAR

- February 20—Winter Field Meeting of Chebacco Pomona Grange at the School.
February 25-March 4—Homemaking Recess.
February 27—Special Meeting Chebacco Pomona Grange at the School.
March 13—Farmers' and Homemakers' Day.

NEW TRUSTEE

Governor Allen has appointed Melville G. Grey, of Wenham, to the Board of Trustees to fill the vacancy caused by the death of George W. Creesy, of Salem.

Mr. Grey is a successful farmer, depending on a widely diversified line of farm products for his income. Mr. Grey graduated from the School with the Class of 1917. He purchased the present farm soon after his release from the Service. He later doubled the size of his farm and increased very extensively his plantings of orchards and asparagus. Mr. Grey was president of the Alumni Association at its inception and has been very constructive in the work of that body. He is very active in the various local and state agricultural organizations.

EDITORIAL

Students of the Agricultural Department of the School produced while on project, in the form of agricultural products or labor, a total of nearly \$64,000 during the year ended October 15, 1928, the Educational Manager recently announced.

This amount is distributed as follows:

Ownership projects, gross receipts	\$14,526.81
Employed projects, paid labor	40,293.77
Employed projects, unpaid labor	9,061.68

The ownership projects involved an outlay for stock and supplies of

\$8,590.32, and included this year work in Vegetable Gardening, Poultry, Floriculture, Small Animals, Marketing, Fruit, and for the first time in several years, a large number of bee projects.

The above figures do not include the value of products raised on the School farm, which annually amounts to about \$20,000 more.

It is interesting also to note that the Short Unit Course in Poultry produced over \$30,000 worth of products, and that members of unit courses in floriculture produced additional returns to Essex County.

These figures, of course, do not include productive benefit to Essex County through the Extension Service activities with men, women and boys and girls. While it is difficult to measure all the benefits and returns financially, one can see that in Vocational Education the County gets immediate financial returns for the money expended in training young folks and adults for efficiency in agriculture.

ALUMNI NOTES

Maurice Headley, 1924, sends in the following address: R. F. D. No. 1, New Hope, Pennsylvania, c/o Thomas Keenan.

Carl Stanton, 1916, Box 207, Petersburg, N. H. Owner of a landscape garden business operating throughout New England, New York and New Jersey.

ELEANOR STETSON, '16, is bookkeeper in a dry goods store in Georgetown.

RALPH JENKINS, '16, was another of our visitors recently. Since graduation he has lived in Maine, and is now cashier in the First National Bank in Skowhegan, Maine. He married Miss Edna Lov of Gloucester, and they have one son.

EDWARD WHALEN, '20. Word has reached us that he and Miss May MacAuley of Danvers were married in September.

PHILIP PEABODY, '22, called at the School recently. He is farm foreman on a large estate in North Warren, Pennsylvania.

WALTER KNOWLTON, '23, and GEORGE WARD, '26, are both employed on the Pingree Farm in Wenham.

GEORGE SARGENT, '24, writes us from the Bay Farm Company in Island Creek, Massachusetts, where he is now employed as dairyman. He tells us that they put out about fifteen hundred quarts of milk daily.

CHARLES MARSTON, '28, of Georgetown, is now working for a wholesale florist in Boston.

C. BROOKS DWYER, '24, is now employed in the wholesale consignment department of Arnold Fisher in the Flower Exchange at 539 Tremont St., Boston.

BRIEF REPORT OF CLUB WORK IN NEWBURY

One day, three years ago, Mr. Stanley DeQuoy, the 4-H Club Agent for Essex County, paid a visit to the Woodbridge School in Newbury and asked the pupils to join 4-H clubs. An eleven-year-old boy in the seventh grade, Silas Little, Jr., thought he saw something in the idea. He had been carrying on a lone project in dairying and he decided to continue this and try the poultry work too. The next summer he was chosen dairy club champion and spent a week at Camp Gilbert at the Massachusetts Agricultural College at Amherst, the reward of all club champions. On his return he was so interested that he obtained leaders for four clubs, dairy, poultry, forestry and garden. That was the beginning of organized club work for boys in Newbury.

This year Newbury has the above clubs, besides a sewing club and two handicraft clubs. One handicraft club meets every Friday afternoon for the last half-hour of school and is led by Mrs. Susan K. Pottle, teacher of the fifth and sixth grades; the other club meets in the basement of the Woodbridge School every Monday evening, where a bench has been built of planks donated by the town of Newbury. This club has as a leader, Mr. Nat L. Bishop, an expert professional carpenter. The school basement has electric lights and a small coal stove and is very comfortable. The club started its work by making clothes-line reels.

The forestry boards, showing fifteen different kinds of native commercial woods in three surfaces, are always a source of great interest to all who see them. The first year members of this club have captured first prize on their boards at the Topsfield Fair both years since its organization. Mr. Arthur Gilman, the first leader of the forestry club, had in former years worked on timber in the New Hampshire forests. His son Oscoe, a Newburyport High School freshman, is now acting leader.

Newbury clubs are winning their share of prizes at the Topsfield Fair and the Boston Poultry Show. They have sent two dairy champions and one poultry champion to Camp Gilbert at Amherst, and a delegate to Camp Field at Brockton and one to Camp Vail at Springfield. Present indications are that more champions are to come.

Each year, in May, the clubs hold an exhibition of their work in Parker Hall, near the Woodbridge School. Last year the exhibit of the forestry club was especially attractive and it was sent to the Brockton Fair.

GRAFTING SEASON IS APPROACHING

There are two general kinds of tree grafting in common use by fruit growers. The first, known as top grafting, is used to change the variety of the tree; the second, known as bridge grafting or repair grafting, is used to repair the damage caused by rabbits or mice to the trunks of trees.

It is easily possible by top grafting to change a tree from an unknown or undesirable variety to a known and desirable variety. Even wild or seedling apple and pear trees may, by this process, be made to bear choice varieties of fruit. For example, a tree which has always borne only cider apples may be grafted to McIntosh and with good culture it will bear just as good apples as any McIntosh tree. In fact, it is possible to grow several varieties of apples on one tree, if necessary, but it is not good commercial practice.

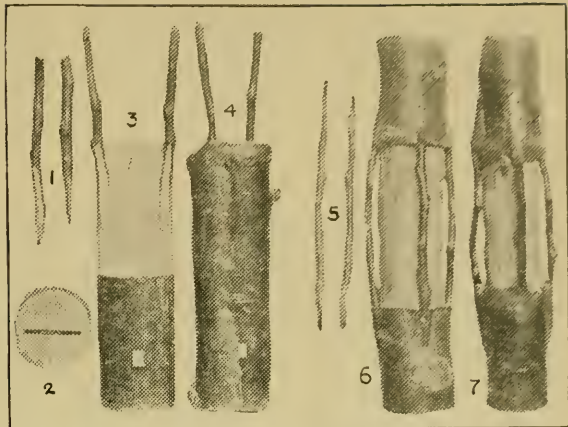
CLEFT GRAFTING

Cleft grafting is probably used more than any other method of top grafting. Limbs which are one-half to two inches in diameter are chosen to be grafted, cut squarely across with a sharp, fine-toothed saw and split down the middle with a grafting chisel as shown in Fig. 2, and the halves held apart by means of a wedge in the center while the cions are inserted. Cions are cut always from the previous season's growth of the variety desired; the lower end is cut in the shape of a wedge as illustrated in Fig. 1, leaving three buds on each, with the lowest bud almost between the cuts which form the wedge.

CAREFUL WORK NECESSARY

Great care should be exercised in placing the cions in the cleft so that the green cells (cambium layer) directly underneath the bark of the cion coincide with the green cells (cambium layer) underneath the bark of the stock as shown in Fig. 3. The lowest bud should be placed on the outside. The wedge should be gently removed, in order not to displace the cions, and all the open wounds should be thoroughly waxed, as shown in Fig. 4. Two cions are used in order to stimulate healing of the wound, the inferior one first being suppressed by pruning back, and later being entirely removed.

Progressive fruit growers as well as lovers of good fruit, are using this method of propagation to change unprofitable varieties into standard ones to meet the market demands and to get some of the new varieties of apples without waiting for the young trees to come into bearing. It is possible to get fruits in the minimum of



1. Cions for cleft grafting 2. cross-section with cions in place, 3. cions properly placed, 4. Completed waxed cleft graft, 5. cions prepared for bridge grafting; 6. cions properly placed and secured; 7. Completed waxed bridge graft

time by this method. Young trees hold the greatest possibilities and trees older than twenty-five years should in most cases not be top grafted.

SEASON FOR GRAFTING

The season for grafting lasts as long as the sap flows in the stocks and the cions remain dormant. March and April are the usual months for grafting in Essex County. If not more than one-third of the top of the tree is grafted in one year, it will take three years to complete the operation of changing the variety. Cions should be placed so that they are exposed to the sun, for in this position they make the most rapid growth. Wax made of four pounds of resin, two pounds of beeswax and one pint of linsed oil can be applied either with the hands or as a liquid with a brush when heated.

BRIDGE GRAFTING

Bridge grafting is not properly called a propagation process, but a repair process to a wound caused by an accident. As the name indicates, the cions bridge over the wound between the root and the top of the tree, without which the trees would surely die. For this kind of grafting cions are cut wedge-shaped at both ends, as shown in Fig. 5, and inserted into the live wood so that the cambium layers meet in at least one place on each end, as illustrated in Fig. 6. Small brads serve well to hold the cions in place. All open wounds should be thoroughly waxed, as in Fig. 7, to prevent drying out.

—C. M. Wood.

NEW TESTER OF C. T. A.

The tester for the Essex County Cow Testing Association is now Robert Dill, North Andover. He graduated from the Essex County Agricultural School and has worked on various farms in this and other counties. He spent the most time with Harvey Turner, where he got excellent experience in feeding as well as testing.

The former tester, Harold Holden, was given a rising vote of thanks by the members at the meeting held January 17 at North Andover. He has given excellent satisfaction and earned his promotion to a position in the Bureau of Animal Industry at Boston.

POULTRY CLUB ORGANIZED

The poultry keepers of the Newburyport section of Essex County met at the Y. M. C. A., Monday, January 14, and listened to excellent talks on management and control of disease by W. B. Moore of this School, and A. W. Doolittle, a former instructor here and now connected with the H. K. Webster Company of Lawrence.

Following this, County Agent Smith discussed the problem of chicken stealing and the poultrymen present voted to organize to fight this danger. The officers elected are: President, Warren Mann, Amesbury; Secretary-Treasurer, J. W. Currier, Newburyport; Directors, F. A. Walcott, Newbury, Frank Hobson, West Newbury, Mrs. E. L. Holt, Salisbury.

THE HOME DEMONSTRATION AGENT AS A NUTRITIONIST

In a recent bulletin published by the State Department of Public Health, Miss Foley, our State Extension Specialist in Nutrition, gives such a clear idea of the Home Demonstration Agent's work in nutrition, that we are quoting from the article.

"In order to understand the part which the Home Demonstration Agent plays as a nutritionist, it may be well to explain who the home demonstration agent is. She is a home economics trained person representing the County Extension Service, the State Agricultural College, and the United States Department of Agriculture. The extension service is organized in every state in the union. Each county in Massachusetts, with the exception of Suffolk and the islands (Dukes and Martha's Vineyard) maintains two or three. Each county has for its working unit, a town and sometimes a community organization. Most towns have a town director, a woman responsible for heading up the work in her town. Many of the communities within the town have community leaders. These directors and leaders are generally appointed by the extension service, though in Barnstable County the director is chosen at the town election.

The duty of the home demonstration agent is to give the homemakers of her county the highest possible conception of the profession of home-making and instruct them in the subject matter of its various phases. As nutrition is fundamental and very important to the health and happiness of all members of the household, each home demonstration agent not only stands ready to give assistance in nutrition problems in the home, but also urges groups of mothers to study this subject. Classes are organized, generally with the help of the community leader or town director, and these groups are met regularly for a series of meetings.

The two projects which are being emphasized in the state at this time are Child Feeding and Food Selection. The Child Feeding project covers a series of two or three meetings. We have a series of five printed leaflets, covering all phases of Child Feeding, beginning with the pre-natal period, through adolescence.

The Food Selection project is divided into nine outlines, one for each lesson. Generally four from the nine are chosen for a series of meetings. A luncheon or samples of food are served at each meeting. Foods stressed are milk, vegetables, fruit, dark cereals, eggs and meat substitutes. Recipes for the use of these various foods are furnished at each meeting.

The topics covered in the series are balancing of the diet, planning and serving meals, food for the sick and convalescent, food budgets, school lunches, community meals, factors other than food in good nutrition; and overweight, underweight, and constipation as they are influenced by the diet."

COUNTY WOMEN INTERESTED IN FEEDING THE FAMILY

Meetings in child feeding are being conducted about the county. On one of the stormiest days of the season ten community leaders from South Groveland, North Andover, Georgetown, Methuen and West Newbury, met Miss Foley for their second meeting in child feeding.

Other groups are being formed in Amesbury, Newbury, Newburyport, Salisbury, Byfield, Beverly and Essex. We expect more groups will be formed by March 1.

Food Selection is being carried in Ipswich and Danvers.

—*M. P. Crawford.*

PRIZE SPEAKING CONTESTS FOR AGRICULTURAL STUDENTS

Plans are now completed for the second annual prize speaking contest for students in the County Agricultural Schools and Agricultural Departments of High Schools in this state. The final contests will be held in Amherst in connection with the annual High School Day of the Massachusetts Agricultural College.

Elimination contests will be held in various districts throughout the state and the winners in these contests will represent their respective schools in the state contest.

The purpose of the contests is to promote interest in oral presentation of farm problems and their solution. Suitable prizes will be awarded by the Massachusetts State Board of Agriculture. The committee in charge consists of Mr. Rufus W. Stimson, State Supervisor of Agricultural Education for Massachusetts; Mr. Leslie Brown of the Norfolk County Agricultural School, and Mr. George E. Gifford of the Essex County Agricultural School.

Miss Gertrude Colby, of Newbury, a three-year student in the Agricultural Department, won the First Prize of twenty dollars from the Massachusetts State Fairs Association for the best essay on the topic, "What I Learned at the Agricultural Fair."

LUNCHEON AND CAFETERIA MENUS PREPARED FOR FACULTY AND STUDENTS BY HOMEMAKING DEPARTMENT

In the Homemaking Building a cafeteria is available to all boys and girls attending the school, where they may purchase a complete lunch for 15c to 25c. About one hundred and fifty avail themselves of this service daily. In addition, every noon the boys who work and live on the school farm are served family style dinner.

The following are two sample cafeteria menus:

1. Corn chowder, fruit salad, creamed mixed vegetables, cream cheese and date sandwich, bread and butter sandwich, Norwegian prune pudding, fruit, milk or cocoa, and cookies.

2. Fricassee of meat, mashed potatoes, squash, cabbage and carrot salad, lettuce and mayonnaise sandwich, bread and butter sandwich, fruit custard, cookies, fruit, cocoa and milk.

The preparation of these menus gives the girls training in quantity cooking as well as serving.

Through the willingness of the faculty to purchase their lunches at the school, another group is busy every morning preparing a complete luncheon menu. The service in the faculty dining room is cafeteria, but the menu is not.

The Seniors and High School Specials are responsible for this luncheon. Because of the smaller number served they are able to have more advanced work and serve it in a daintier manner.

They also have an opportunity for formal service when the trustees, special guests, or various organizations throughout the county visit the school, and upon occasion act as hostesses to visiting guests.

Ethel M. Moore—Eltin M. Howe.

GREEN AND WHITE

The 1929 "Green and White" will make its appearance soon. This publication will contain the usual departments and enumerate the various activities of the School year 1928-29. Several pages of the book will be devoted to the alumni. The editorial board has been selected, with Maynard Haley of Rowley as Editor. Instructor Carlson will be faculty advisor in the agricultural department.

"It is the farmer's rare privilege to raise crops and rear animals. The sheer joy of the thing is itself a reward. There is no competition in this kind of satisfaction, no surplus." —*From "The Harrest," by L. H. Bailey*

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 10

HATHORNE, MASS., MARCH, 1929

NO. 3

GASOLINE USED ON FARMS TAX EXEMPT

All farmers in Essex County who will use gasoline for strictly farm purposes this year are urged to send in their names to the County Agent, who is co-operating with the State Department of Agriculture in a movement to assist in getting the refunds on gasoline used other than on highways. The gasoline tax law which went into effect January 1 provides that gasoline not used on highways is exempt from the tax. There is considerable red tape about getting these refunds, and the State Department of Agriculture, in co-operation with the County Agents, has a plan to make the securing of refunds more simple.

The law provides that the tax shall be paid on all gasoline without regard to the use to which it is to be put, when purchased. It further provides that where the gasoline is to be used for tractors in farm use, spraying outfits, or other use except in automobiles driven on highways, the State will refund the two cents a gallon on presentation of the proper application. The applications for refund are to be filed with the Department of Corporations and Taxation within ninety days of the time such gasoline is purchased. Blanks can be secured direct from this Department, but it is the belief of Dr. A. W. Gilbert, Commissioner of Agriculture, that a good many farmers will not take the trouble to send to Boston for a blank each time he is entitled to a refund. Arrangements have been made whereby the State Department of Agriculture will secure these blanks in quantity and send them regularly to a mailing list including all farmers who make known their desire to have this service. Dr. Gilbert has asked County Agent Francis C. Smith to assist him in getting such a list in Essex County. Any farmer who desires to get this service should send in his name to the County Agent at once. The names will then be sent to the Department of Agriculture and placed on the reg-



Robert and James Sawyer of Bradford Score High in Food Habits

ular mailing list to receive refund blanks.

The law allows ninety days from the time of purchase to file refund applications. Under the arrangement which has been developed, the year will be divided into four ninety-day periods and blanks will be sent out shortly before the expiration of each ninety-day period. As the law went into effect January 1, the first ninety days will cover January, February and March. The Department of Agriculture will send to all names on the mailing list a refund blank, together with a letter of advice as to how to fill it out, about March 20. This will give ample time for each farmer to fill out his blank and send it in to the Department of Corporations and Taxation. Another set of blanks will be sent to all on the mailing list shortly before July 1, October 1, and January 1.

All farmers who wish to get refunds must remember to get sales slips covering this exempt gasoline when they buy it. These sales slips must accompany the applications for a refund or the application will not be accepted.

—Mass. Dept. of Agriculture.

PROPER DIET KEEPS THESE CHILDREN IN EXCELLENT HEALTH

The illustration this month shows the two children of Mr. and Mrs. Robert Sawyer of Salem Street, Bradford, as they appeared two years ago when the picture was taken. The one in front is Robert, now aged seven years, and the younger one is James, now aged four years.

The food habits of both children are such that they obtained a very high rating on the food habits score card for juniors, prepared by May E. Foley, Nutrition Specialist for this state. Each day they have one quart of milk, plenty of fruit and vegetables, including green and raw vegetables. They have meat once a day, never pork or veal. They are fond of dark breads and milk desserts, and especially like baked potatoes, eating the skins also. No penny candy for Robert and James, but a piece of good candy after meals. They enjoy life in the open on pleasant days and get twelve hours of sleep each night, as all children should.

—M. P. Crawford.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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address the Essex County Agricultural
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CALENDAR

April 29-May 6—Recess Homemaking
Department.
May 25—Junior High Field Day at
Hathorne.
June 12—Better Homes Day at Ha-
thorne.

FARMERS' AND HOME- MAKERS' DAY

Over a thousand persons were in at-
tendance at the Annual Farmers' and
Homemakers' Day, held at Hathorne
on March 13. Over three hundred au-
tomobiles were parked on the school
grounds during the noon hour.

The educational and trade exhibits
were fully up to the standard set in
previous years and ample opportunity
was given to view and study them.

The main speaker of the morning
was Mr. Herbert W. Gleason of Boston,
who took for his topic, "Gardens and
Garden Arrangement." This was fol-
lowed by Mr. George L. Farley, State
Leader of County Club Agents, who
spoke on "4-H Club Work in Massa-
chusetts."

The sectional meetings in poultry,
vegetable gardening, fruit, floriculture,
bee-keeping, and dairying, were well
attended.

In the Homemaking section Mrs.
Elsie K. Chamberlain spoke to a large
audience on "Everyday Art in the
Home."

Farmers' Day for 1929 was one of
the most successful ever held at the
School.

1928-1929 ATHLETIC ASSOCIATION REPORT

The annual meeting of the Essex
County Agricultural School Athletic
Association was held on Mar. 7, 1929.
The President, Llewellyn Jones, called
one hundred thirty boys and twenty

girls to order at 12:30. The Secretary
read the Advisory Council's report of
the award of fourteen football letters
and five track letters in recognition of
a successful season. The Treasurer's
report showed that the Association
was in excellent financial condition.
The Association does a \$4,000.00 busi-
ness each year. The report shows a
profit of \$200.00 earned this year, and
a total balance of approximately
\$600.00.

The officers elected for the ensuing
year are: President, Clifford Bryer;
Vice President, Ida May Perkins; Sec-
retary, Louise Jameson; Treasurer,
Mr. Mostrom; Historian, Wendall Hil-
ton; Advisory Council: Faculty Mem-
ber, Mr. Wright; Alumni Member, Mr.
Eastwood; Raymond Reed, Everett
Fisher, Leonore Alward, and Veronica
Marquis.

The President expressed the appre-
ciation of the Association for the fine
cooperation between the Alumni and
undergraduate classes in giving a
total of seventy-eight (\$78.00) dollars
towards the football sweater fund.

The names of the girls' basketball,
boys' basketball and hockey letter
winners were announced.

Mr. Wright and Mr. Mostrom were
given a vote of thanks for their valu-
able work throughout the year.

ENAISE ST. JOHN, Secretary.

ALUMNI NOTES

Wallace S. Moreland, '21, is now
assistant editor in the Extension
Service of the New Jersey Agricul-
tural Experiment Station.

Among the graduates who returned
to the school on Farmers' Day were:
Theodore McNichol '26; Leonard Ives
'20; Bradford Burnham '16; Edward
Lombard '24; George Ward '26; Har-
old Rogers '28; Wallace Rennie '28;
Norman Morgan '25; Maynard Brown
'24; Joseph Finocchio '28; William
Wilson '28; Gardner Caverly '22;
Horace Shute '27; Alexander Mac-
donald '20; and Leonard Russell '18.

Stanley DeQuoy '17, now Club Agent
for Grafton County, may be addressed
at Woodsville, N. H.

A. Porter Henderson, '28, is gar-
dener at the North Reading Sanita-
rium.

Henry Smith, '28, is at the Lester
Leland Estate, West Mauchester, for
the summer.

Carl Phipps, '21, Everett Jones, '22,
and Roland Plumber, '23, are em-
ployed at the Chedco Farm, Berlin,
Mass.

Harold B. Rogers, '28, is working
with his father at the Spring Hill
Farm, Ward Hill, Mass.

Mr. and Mrs. Joseph H. Seeley may
be addressed at 632 Main Street, La-
conia, N. H.

GRADUATE IN LANDSCAPE BUSINESS

C. Gardner Caverly, a graduate of
this school, class of 1922, has been
engaged in the landscape garden busi-
ness for the past five years. His
nursery is located at his father's es-
tate on High Street, Ipswich, one
mile from the Center, and contains
hardy shrubs and a selected variety
of perennial plants. The nursery
also has several hundred evergreen
seedlings.

ONE GRADUATE WRITES ABOUT FRUIT JUDGING

Somehow I feel very much inter-
ested in the fruit judging teams that
are sent out. Perhaps it is because
I am an alumnus, or perhaps it is
due to may having participated in
those contests before.

Will you please tell me the results
of the Worcester contest? I do hope
the team is way up high.

Some day a team will be sent out
that will shatter all records, and I
hope some day to see a "pirate's
spoil" of gold medals and fancy rib-
bons. Here's hoping that you have
a record breaking team this year.

"LISTENING IN"

M. A. C. FORUM ON WBZ-WBZA MONDAYS AT 6:00 P. M.

Apr. 1	Dairy Manufactures	(m)
	J. H. Frandsen	
Apr. 15	4-H Club Program	(w)
	Marion Forbes	
Apr. 22	Field Crops	(m)
	R. W. Donaldson	
Apr. 29	Flower Growing	(w)
	C. L. Thayer	
May 6	Your College	(m)
	President Thatcher	
May 13	Food Problems	(w)
	May Foley	
May 20	Better Kitchens	(w)
	Mrs. H. J. Haynes	
May 27	Clothes	(w)
	Esther Cooley	
June 3	Food Problems	(w)
	May Foley	
June 10	Market Garden Problems	(m)
	Paul Dempsey	
June 17	Take Care of the Lawn	(m)
	L. S. Dickinson	
June 24	Fruit Problems	(m)
	W. H. Thies	
	(m)—men	
	(w)—women	

ABORTION GERMS ENTER THROUGH MOUTH

Dr. J. M. Buck, Assistant Superintendent Experiment Station of the Bureau of Animal Industry, Bethesda, Maryland, gave an excellent talk on the Prevention and Control of Contagious Abortion at Farmers' Day recently. He said in part as follows:

"The abortion germ is no respecter of breeds or age. It affects the old and the young. Smutty feeds do not cause abortion. Mouth infection is the most prevalent method, although udder infection may become a menace because of spread through milk. Udders sometimes harbor these germs for years. The uterus tends to clean itself and rarely shows presence of any such germs after two months or so.

"One of the losses from abortion is the tendency to garget. Recently some authorities attribute undulant fever in man as caused by abortion germs in cattle.

LOSSES

"Some have estimated the losses from this disease at about \$34.00 per cow. This loss includes the loss of the calf, the decreased use of the quarters and milk production. Frequently sterility is an aftermath of abortion and it may cause a similar disease in man called undulant fever.

DIAGNOSIS

"The only real test is the agglutination test. This is simply an ordinary test tube into which is put a small amount of blood from the cow. This is tested for agglutinin by the laboratory technician.

PREVENTION

Medicinal agents are quackery. Buy only animals from state accredited or certified herds and cows free from contagious abortion.

CONTROL

1. Test and slaughter all reacting animals, 60-day intervals.

2. Segregate positive and negative animals. This means two separate herds. Generally not practical for small herd owners but adapted to large herds and wealthy men.

3. Sanitary management. "This method requires that all animals be considered aborters and that they be isolated during calving time and as long thereafter as uterine discharges can be detected, the providing of maternity stalls for the use of cows at time of calving which may be disinfected with frequency, the disposing of dead fetuses (bury or burn), afterbirths, and bedding suspected of being contaminated with the abortion germ, so that these will be inaccessible to healthy stock, and the exer-

cise of care in the handling of calves and the bull."

Do not introduce stock from outside sources to such a herd because it seems to keep infection active.

4. Vaccination. The introduction of live organisms may endanger the milk. Udder infection frequently results. In cows udder infection often results. In virgin heifers it might be used effectively. This method is not yet so efficient as we would wish.

The practicing veterinarian is the logical person to aid in a program for eliminating the abortion reactor. Mouth is the great source of entrance point for the abortion germ as it is for the T.B. germ.—F. C. S.

INSPECTION OF FARM WATER SUPPLY

Because of the fact that various farm owners are interested in making sure that their water supply is sanitary and because the chemical analysis by commercial concerns is quite expensive, the Massachusetts Agricultural College has made arrangements to examine samples of water when requested by farmers of this state.

The Massachusetts Agricultural College Laboratory Service Bacteriologist, Dr. R. L. France, Amherst, Massachusetts, will furnish information, suggestions for improving the water supply, and conduct an analysis upon request. Those interested should write to him.

INCREASED INDEMNITY FOR DAIRYMEN

According to a recent announcement, Congress recently passed a bill, effective immediately, increasing the Federal indemnity on T.B. reactors from \$25 to \$35 on grades and from \$50 to \$70 on purebreds.

This means that at present the farmers' loss from reactors will be very slight. A cow appraised at \$150 would bring around \$50 salvage, one half the remainder is paid by the State, or \$50, and one third the remainder, or \$33.33, by the Federal Government. Thus the dairyman can get \$133.33 indemnity on a grade cow appraised at \$150.

It is possible to get \$85 total indemnity plus the salvage on grade cows, and a total of \$145 plus the salvage on purebreds.

Dairymen will likely take advantage of this new indemnity now by having their herds tested.

NEW YORK PASTURE LAND

Cost of maintenance, 4.3% of value. Cost of pasturing "animal unit," \$4.00 to \$5.00 per acre. Average cost pasture, 5.4 cents per cow day for 161 days. Additional cost of supplementary feed, 4.3 cents per day, or a total of 9.7 cents for feed and pasture per day. Returns from milk, 34 cents. Profit over feed cost, 24.3 cents per day. This is better than paying hired man to bring feed to cows.

Average net return of pasture acre for season was \$11.37.

Average cost of general crops on New York farms, 1923-27, was \$4.00; returns \$11.00. Average return for labor, 40 cents per hour.

"The price of hay is now so low and pasture is such a cheap feed that in many instances it will pay better to convert some of the meadows into pasture land than to break up more land for crops."

The New Hampshire Experiment Station reports a three-day observation on the quantity of water consumed by milk cows. Sixteen cows averaged 4.38 pounds of water for each pound of milk produced. This varies with breed and size of cow.

The U. S. Bureau of Dairy Industry Farm at Beltsville, Maryland, filled four silos in fall of 1926 without any tramping, but distributed. In 1927 these silos were filled without either tramping or distributing. The silage kept perfectly both seasons.

The Market Garden Field Station recommends the use of 56% acetic acid applied to the soil to disinfect against damping off of lettuce, cucumber and tomatoes. This is cheaper than the use of formaldehyde. Use eight pounds in 50 gallons of water and at rate of two quarts per square foot of soil. Apply at least ten days before seeding.

It takes a stronger mind than most of us possess to attend to our own business and the other fellow's too!

In the face of ubiquitous talk about the lengthening of the span of life, it is well to remind ourselves that it is the maintenance of health rather than mere longevity to which we should aspire. Life itself is worth little when our usefulness has ceased. By making health rather than sustained existence our goal, we build not only for a longer life, but for a fuller and richer one as well. This is the ultimate ideal of public health.

—Matthias Nicoll, M. D.

EAT EGGS

Prepared by MAY E. FOLEY
State Nutrition Specialist

The connection of eggs with Easter time goes back many centuries. The egg was regarded by the ancient Egyptians, Persians and Greeks as emblematic of creation. The Christians borrowed the egg from them and made it a part of their Easter festivities, as emblematic of the Resurrection.

The custom of coloring eggs appears to be exceedingly ancient. In old England, it was a popular custom to roll colored eggs down Greenwich Hill at Easter and we have, in the modern custom of rolling eggs down the green at the White House at Easter time, this quaint old custom in a modern setting.

It is an old superstition that rabbits lay eggs on Easter Eve; hence, the rabbit's connection with Easter.

Now that eggs are getting plentiful, it is well to use them liberally in planning meals for the family. For each member of the family over one year of age an egg a day at this time of year will be wholesome and not expensive, when the food value is considered. They make a very welcome substitute for meat after the winter diet, and may be used either as a main dish or in a variety of desserts.

Eggs are classed as one of the protective foods. They supply many of the substances found in milk. Because of their richness in iron, they are one of the first foods to be added to the diet of the growing child. They are also rich in other minerals, in vitamins, and in protein.

ANDOVER TOWNSMAN COMMENTS ON SENIOR PLAY

The play, "Horace Abbott, Letterman," given at Grange Hall on Friday evening, was a success in every way. The plot of the story was of the sort that appeals to all interested in young people. The parts were especially well done and merit real praise. The author and those who coached the play showed wide knowledge of the young people of today, and after all they are the same as they always were, seeking for life's richest treasures and never really happy until they make life give them said treasures. The evening was a financial success, netting a goodly sum toward the amount which Andover Grange hopes to be able to give this year toward the Educational Aid Fund. The committee in charge wishes to thank all who helped to make this so great a success.

COUNTY HOME ECONOMICS EXTENSION COMMITTEE MEETS

The County Home Economics Extension Committee held its fourth meeting on March 26.

Reports were given of extension projects carried since last meeting. Plans were made for the annual meeting of town chairmen and project leaders, to be held May 21, and also for Better Homes Day to be held on June 12.

BETTER HOMES DAY

Mark June 12 on your calendar and plan to come to Essex Aggie for your Better Homes Day.

AROUND THE COUNTY IN MARCH

Child Feeding

North Andover, Georgetown, South Groveland, Methuen, West Newbury, Salisbury, Newburyport, Newbury, Rocks Village (Haverhill), Beverly (Kial Side, Centerville, Health Center, North Beverly), Danvers, Topsfield, and West Peabody.

Nutrition—Adult

Ipswich, Danvers, South Groveland.

Kitchen Improvement

Peabody.

Living Room Improvement

Beverly, Ballardvale, and Danielsville.

Millinery

Peabody, Middleton.

Furniture Renovation

Newbury.

Clothing

Amesbury, Newbury.

Machine Attachments Demonstration

Newbury.

Dress Form Demonstration

Middleton, Danvers, Beverly.

\$25 AWARD OFFERED FOR OLDEST McINTOSH TREE

Twenty-five dollars for the oldest McIntosh tree in Massachusetts is the award being offered by the Massachusetts Fruit Growers' Association in its effort to compile an authentic history of the McIntosh apple, commonly known as the leader of New England apples.

"We believe," says W. R. Cole of the Massachusetts Agricultural College and Secretary of the State Association, "that we have found the oldest commercial orchard of McIntosh trees, but the history of this apple will not be complete without a record of the oldest tree."

While the association is very anxious to locate the tree, it demands substantial evidence as to the age of the tree and, in offering the award of \$25, says that it holds good until January 1, 1930.

WINNERS IN FAIRS ESSAY CONTEST

Mr. A. W. Lombard, Secretary of the Massachusetts Agricultural Fairs Association has announced the winners in the 1928 essay contest on the subject: "What I Learned at an Agricultural Fair." Miss Gertrude Colby of Newbury, a student in the Agricultural Department of this School, was awarded the first prize of \$20.00. Second prize of \$15.00 was awarded to Robert M. Koch of Greenfield High School; third prize of \$10.00 was won by Gilbert B. Blackledge of Potteryville, a student in the Bristol County Agricultural School, and the fourth prize of \$5.00 went to Ralph H. Grange of Westfield High School.

The essay contest will be conducted again this year and is open to regularly enrolled students in high or vocational schools. Printed announcements of this year's contest will be mailed about the middle of April.

PUBLIC SPEAKING CONTEST

The public speaking elimination contest for the county schools will be held on Wednesday, April 3, at the Norfolk County Agricultural School at Walpole. Elimination contests for agricultural students in high schools are being held throughout the State in preparation for the final contest on Friday, May 3, at the Massachusetts Agricultural College.

High School Day held annually at the Massachusetts Agricultural College is scheduled for Saturday, May 4.

A large number of students from this school attended the Flower Show at the Mechanics Building on March 20.

TOWN MEETING

At the joint assembly on March 21 a mock town meeting was presented by students in the Civics classes under the direction of Instructor Metcalf. The various items in the warrant were disposed of in a business-like manner by Moderator Shtrumpfman. The meeting was a demonstration of parliamentary methods now in use in conducting town business.

GREEN AND WHITE

The 1929 Green and White is now ready for distribution. The book contains 48 pages and is well worth the subscription price of fifty cents to any alumnus of the School. Do not delay sending for your copy, as the supply is limited.

ESSEX FARMER AND HOMEMAKER

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VOL. 10

HATHORNE, MASS., APRIL, 1929

NO. 4

THIRD ANNUAL JUNIOR HIGH SCHOOL DAY

HATHORNE, SATURDAY, MAY 25

On Saturday, May 25, the School will entertain the members of the graduating classes of the Grammar and Junior High Schools of Essex County. The idea of setting aside one day at this season of the year to entertain the young people of the County is a new one having been tried out two years ago for the first time.

PROGRAM

- 8:30-10:30 A.M. Registration.
9:00-11:00 A.M. Trips over the School Farm and Gardens; Homemaking and Agricultural Buildings open for convenience of guests and for inspection.
10:30-11:30 A.M. Agricultural and Homemaking Contests.
11:30-11:45 A.M. Live Stock Parade.
11:45-12:30 P.M. Lunch (box lunch) and Community Singing.
12:30-1:30 P.M. Entertainment on Lawn.
1:30-4:00 P.M. Athletic Events.
4:00 Awarding of prizes

ESSAY CONTEST

Because so many compositions were received from boys and girls who visited the School two years ago, an essay contest has been arranged as part of the General Field Day program.

Any boy or girl who visits the School on May 25 may submit an original essay not to exceed 500 words in length on one of the following topics: "How I Spent a Day at Our Essex County Agricultural School," "A Profitable Junior High Day," "What I Observed at the Essex County Agricultural School," or "Why I Think the Essex County Agricultural School Is a Benefit to the Boys and Girls of Essex County." Prizes will be awarded to one boy and one girl submitting the best essay on or before June 8.

An alternate program for indoors has been prepared and will be carried out in case of stormy weather.

The organizing of groups is left with principals and teachers in the different schools of the County.

Visitors to the School on that day are requested to bring lunch as only light refreshments will be for sale.

—F. A. Smith, Director.



SILAS LITTLE, JR.

GIRLS' BASKETBALL LETTERS

At the Girls' Assembly in the Homemaking Building Thursday, March 28, Mr. Coughig gave a very inspirational talk on athletics. School letters were awarded to girls who had met the requirements in basketball. The following received their "E's":

Capt. Ida May Perkins, Haverhill; Mgr. Leonore Alward, Newburyport; Annie Dickinson, Methuen; Miriam Hilton, Danvers; Bessie Hickey, Peabody; Evelyn Hudson, Lawrence; Miriam Pohju, Peabody; Enaise St. John, Milton, N. H.

—T. Clarke.

PUBLIC SPEAKING CONTEST

Three students from this School and one student from the Norfolk County Agricultural School will represent the county school district in the State Public Speaking Contest to be held at the Massachusetts Agricultural College on May 3.

Richard Woodbury of Fitchburg, Clifford Bryer of Cliftondale and Miss Ida May Perkins of Haverhill, all students of this School, and Frank Locke of the Norfolk County School are the successful contestants.

SILAS LITTLE, JR., OF NEW- BURY SELECTED AS DELE- GATE TO WASHINGTON, D. C.

Silas Little, Jr., age 16, son of Mr. and Mrs. Silas Little of Newbury, has won the distinction of being the first boy in this county to be selected as a delegate to the National 4-H Club Camp held annually in June at Washington, D. C. This camp is composed of four boys or girls from each state in the country who have demonstrated their superiority in 4-H Club work. The other three delegates who have been chosen from this state are Mary Hall of Franklin County, Ruth Crickshank of Bristol County, and Alton Hodges of Suffolk County. These four delegates will represent the 10,000 or more 4-H Club boys and girls in Massachusetts.

Essex County is entitled to send a delegate once every three years, and this coveted honor has been awarded to Silas Little, Jr., for his outstanding achievements in the 4-H Clubs of his home town.

Three years as a poultry club member, four years as a dairy club member, two years of forestry and one year of gardening puts Silas to the fore.

He was County Champion of the dairy club in 1926 and he and his brother are the leading candidates for County Garden Champion for 1928, the winners receiving a trip to Camp Gilbert at Amherst this July.

He was also chosen as a delegate to Camp Vail last year. In addition to prizes won at the county fairs he placed third in the Junior Poultry Judging Contest for 4-H Club members at the recent Boston Poultry Show.

Just to illustrate the pluck or the real Club spirit of this lad, we remember that about three years ago his entire flock of hens was stolen. This did not discourage him, for soon after he had suffered this loss he re-established himself in the raising of poultry and this year he will have close to 250 chickens. This goes to show that difficulties do not prevent this club worker from successful achievement.

—Horace Shute, County Club Agent

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

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CALENDAR

April 19—Alumni Association Dance.
April 29-May 6—Recess Homemaking Department.

May 25—Junior High Field Day at Hathorne.

June 12—Better Homes Day at Hathorne.

June 19—Parents' Day, Homemaking Department.

AGRICULTURAL INSTRUCTORS KEPT BUSY DURING SUMMER SUPERVISING PROJECTS

During the month of April agricultural instructors transfer considerable of their attention and time from the classroom to the home or employed summer projects of their students.

Poultry instructors must begin this transfer in March, when circumstances make it necessary for students to commence practical work on incubation and brooding chickens. During this month poultry instructors often find back roads very difficult to travel. Students' project plans that have been worked out in the classroom during the winter under an instructor's guidance are put into operation in the spring under the instructor's supervision. This "project method" of instruction makes it necessary for instructors to visit their students regularly from March or April until October. On these project visits instructors keep their students informed on seasonal problems of plant and animal feeding, disease and insect control and the multitude of problems that must be met and mastered in connection with the growing of horticultural or animal husbandry products for food or for the beautification of the landscape.

Instructors average to see each student on project once every two weeks or oftener if conditions make

more frequent visits necessary. Visits are usually made oftener than bi-weekly when the student first starts on a project.

Project instructors often have supervision of twenty-five students scattered among the thirty-three cities and towns in Essex County. Trips of fifty to seventy-five miles a day in connection with project supervision are not uncommon.

Instructors who have departmental responsibilities on the school farm in addition to outside project supervision have a double load.

Parents and neighbors take advantage of the visits instructors make to students by asking the instructor's advice on their own problems.

Instructors who specialize in certain agricultural subjects are frequently enlisted to give aid to adults who request information from the County Agent's office.

—E. E. Metcalf.

SPRAYING INFORMATION

Following are a few bits of advice to the orchard owner on successful spraying:

Use a mist.
Insist on thorough coverage.
Renew the nozzle disc with each spray application.

Spray on time. Timing is as important as materials.

Follow recommendations regarding amounts of materials to be used.

Avoid a spray gun unless you can maintain a pressure of at least 250 pounds.

Use gun wide open only when absolutely necessary. Foliage injury often comes from faulty use of the gun.

Use large size hose. There is far less loss of pressure in a $\frac{3}{8}$ " hose than in a $\frac{1}{2}$ " hose.

Spray material goes farther and is more effective if broken into mist-like drops. Pressure and size of disc opening determine the size of drops.

The cheapest outfit may be the most expensive in the long run. The spray program is generally the weakest point in the operation of an orchard.

Starting the season with a poor sprayer gives the orchard pests a big advantage.

—W. H. Thies.

The School can yet supply cions of many of the new apple varieties. We strongly recommend Red Gravenstein as an excellent commercial sort.

The School offers for sale raspberry plants of several sorts, including Latham, which appears to be exceptionally hardy and prolific.

Students from both departments of the school presented a program of songs, dances, and agricultural speeches before a large audience of Grangers in Middleton on March 13.

Four things a man must learn to do if he would make his record true:
To think without confusion clearly;
To love his fellow men sincerely;
To act from honest motives purely;
To trust in God and Heaven securely.

—Van Dyke.

SUMMARY OF WEATHER OBSERVATIONS

JANUARY, FEBRUARY, MARCH, 1929

	Jan.	Feb.	Mar.
Maximum Temp.	59° (6-18th)	52° (18th)	65° (22nd)
Minimum Temp.	-3° (16th)	-1° (5th)	6° (10th)
Ave. Daily Temp.	25.8°	27.6°	38.8°
Boston Norm. Temp.	27.9°	28.8°	35.5°
Great. daily ch. in T.	31° (6th)	33° (5th)	36° (12th)
Least daily ch. in T.	2° (4th)	6° (28th)	2° (14th)
Precipitation	2.80" (8" S)	4.51" (23"S)	2.93" (4"S)
Boston Normal Prec.	3.50"	3.24"	3.81"
Excess or Def. to date	-1.70"	+1.57"	-.31"
Total for year to April 1			10.24
Ave. relative humidity			
8 a. m.	73.5%	78.4%	73.4%
No. days on which rain fell	10	11	14
No. clear days	18	10	8
No. partly cloudy days	7	9	11
No. cloudy days	6	9	12
Total hours sunshine	192	151	168
Percent sunshine	65.5%	51.2%	45.4%

The weather as a whole has averaged much warmer than normal, especially during March. Rainfall is close to normal for the period. Since January the weather has not averaged nearly as clear as during that month evidenced by the decreased number of clear days and percent of sunshine.

—H. A. Mostrom.

HOT BEDS HEATED BY HOT WATER SYSTEM

If you have not visited the hot-beds of the vegetable division of this School, you will be interested to inspect the newly constructed Wasco hot-water heating system. The heater was purchased during the winter months and installed by the students of the vegetable gardening classes during class time.

The outfit consists of two thirty-sash lengths about two to three feet apart, running parallel to the greenhouse on a southerly slope. A high twelve-foot windbreak was constructed perpendicular to the beds and greenhouse to break the prevailing northwest winds.

The boiler is located at the westerly end of the lower bed in a pit low enough to bring the boiler down below the return pipes so that gravity will aid the water in circulating around the system.

There are two 1½-inch main or flow pipes in each bed above ground and two 1½-inch return pipes to the boiler under ground. The highest part of each line of pipe is at the opposite end of the bed from the boiler. As water expands when heated, the warm water is pushed to the highest points in the system and then returned to the boiler by gravity. The flow pipes are placed on hangers on the planks or sides of the bed with a rise of 4 to 5 inches in the 90 feet of bed. There is a like drop on the return pipes to the boiler.

The piping was finished and boiler set up so that a fire was started March 10th. For this size boiler, it takes about 30 pounds of coal per coaling at night and morning, consuming a ton of pea coal per month. The present size boiler is capable of heating at least one more length of 30 sash to 60°, when the weather is down to 0° outside. With this point in mind, the cost of operating would be less per sash when heater is running at its capacity than for this season. Accurate figures are being kept on operating the system in comparison with manure-heated beds.

Anyone interested in looking at the newly-installed system or asking any questions as to its operation may do so at any time.

The outfit looks very promising at a lower cost to operate than manure-heated beds and particularly so with the decrease supply of manure.

—C. M. Starns.

CARE AND FEEDING OF CHICKS FIRST FOUR WEEKS, SEASON OF 1929

Because of the fact that more than 75% of the chicks raised in Essex County are reared under coal-burning brooder stoves, this instruction sheet will deal only with chicks brooded in that manner.

Care of Brooder Stoves. Should be filled full of nut coal both morning and night. Shake until live coals appear and remove ashes morning and night.

Temperature. Should be 95° at the outside edge of hover, 2" from the floor the first week, and lowered about 5° each week. A thermometer on the side wall of the brooder house 5" from floor should read from 65° to 75°. Operate front curtains to maintain this room temperature.

Equipment in brooder house should consist of two feed hoppers, two-piece drinking fountains, shallow dishes for grit, shell and charcoal, and 18" high wire or cardboard for use around hovers first week.

Litter. Because of the necessity of weekly cleaning of brooder houses in order to better control coccidiosis, we recommend only shavings as litter.

Number of Chicks per Unit. Under all makes of stoves, with 52" hovers, a maximum of 300 chicks. Much of the trouble from cannibalism is caused from crowding chicks.

Method of Feeding and Handling Chicks. Chicks should not be placed in the brooder house until at least 24 hours old and not over 48 hours old.

Keep chicks in the nursery trays of the incubator, or store them in the regular chick shipping boxes, in a well ventilated warm room until they have reached this age.

Place everything that they are to have in the proper receptacles around the hover, inside the guard, before putting the chicks around the hover. This means chick-size grit, shell and charcoal in shallow dishes, warm water in drinking fountains, and feed in small hoppers. Never let the receptacles get empty.

Feed. We recommend the use of any of the commercial baby chick starting mashers during the first four weeks. These feeds are a balanced ration and no other grains are necessary. Do not feed in waste hoppers so constructed that the chicks or their droppings can get into them.

Green Feed. Cut up mangels, carrots, potatoes, etc., lettuce, cabbage and sprouted oats, starting the second week.

Cod Liver Oil. Should be fed beginning the second week. Mix one cup (half pint) of oil with two quarts of fine cracked corn, three times a week,

and put in on top of feed in hoppers. This amount of oil for every 300 chicks.

Milk. Milk is a valuable food for poultry. Most of the chick starters contain some dried milk, and chicks grow and do well on this food alone for three or four weeks. We recommend the use of semi-solid feed on boards after two weeks, or if a good supply of sour skim-milk is available at a reasonable price, use that. Better plan to feed milk in some form from the time the chicks are two weeks old until they are out on a good grass range.

NOTE—About once a month the Poultry Division of the School, co-operating with the County Agent, prepares a *Poultry Dope Sheet* for the benefit of the poultry industry. Any interested poultryman may secure these by sending name and address to the School. The above was issued under date of March 5.

AGGIE HERD AVERAGED 285 LBS. BUTTER FAT

The Essex Aggie herd consists of grade Holsteins and purebred Guernseys and Jerseys. Records recently completed for 1928 show an average of 17½ cows in the herd. Production, 6749 pounds of milk, but 285 pounds of fat. Average per cent test was 4.2. The milk is sold largely to the Essex Sanatorium at \$5.12 per hundredweight.

The feeding included corn silage, some beet pulp, some apple pomace, green feed, and both fitting ration and the 20% ration. Forty-seven pounds of hay were used per hundredweight, and one pound of grain to 4.4 pounds milk. This is a very wide ratio.

PRODUCTION EFFICIENCY

Of course some cows are not efficient. Boys with no experience, milk and care for the cows and it is impractical to start untrained boys on good cows. Yet the average value of product per cow was \$345.56.

The total feed cost per cow was \$160.31, or \$2.38 per hundredweight. Feed cost per pound fat \$.57. Returns for each dollar invested in feed \$2.43. The feed cost when compared with the County Herd Improvement Association appears to be slightly higher. This is probably due to the fact that hay and silage were figured on market value rather than "cost of production value."

This herd is maintained as a practical working herd, primarily for students and secondarily as a dairy herd, yet it is profitable and worth while. The results compare favorably with herds in the Dairy Herd Improvement Association.—F. C. S.

Farm and Home Week

at

M. A. C. AMHERST

July 23-24-25-26

SAVE THESE DATES

POPULAR RECIPES USED IN EXTENSION CLASSES IN NUTRITION

At this time of the year do you find the members of your family show a lack of appetite and a lack of interest in their food? If they do, try some of the following recipes and see if they do not like the change. We have found these very popular with our nutrition groups all over the county.

The spinach soup made of raw spinach has a more attractive color and flavor than that made from canned spinach. The eggs cooked in a double boiler are like velvet and may be prepared while you are eating your fruit and cereal at breakfast.

We have in our Extension Office some new recipes for the use of milk, fruit, vegetables and whole grain. If you would like to have them just write to your Home Demonstration Agent at Hathorne and she will be glad to send you a set.

SPINACH SOUP

- 1 quart milk
- 1½ cups raw ground spinach
- 4 tablespoons butter
- 2 tablespoons flour
- 1 teaspoon salt

Place the milk in a double boiler with the salt. Wash the spinach, and chop or grind it. If ground, place a bowl to catch the liquid which runs from the grinder, and add to the spinach. Mix the flour and butter until well blended and add to the milk with the ground spinach. Stir until thickened, and the spinach is cooked. This takes about ten minutes.

CABBAGE AND PINEAPPLE SALAD
3 cups finely shredded cabbage
1 cup diced pineapple (drained)
½ cup mayonnaise or cooked dressing
Serve on lettuce leaves or in salad bowl.

CABBAGE, PINEAPPLE AND RAW BEET SALAD

Proceed as for cabbage and pineapple salad, with the addition of ¾ cup ground raw beets. Do not mix these with other ingredients, but season slightly with salt and lemon juice or vinegar, and use as a garnish. This salad may be served individually on lettuce leaves or in a bowl. Raw carrots may be substituted for the beets.

RAW SPINACH, CARROT AND CABBAGE SALAD

- 2 cups shredded cabbage
 - 1 cup ground, chopped or grated carrot
 - 1 cup chopped raw spinach
 - ½ teaspoon salt
 - Salad dressing to moisten.
- A little onion or onion juice may be added if liked.

Serve as individual salads on lettuce leaves, or in a bowl with cabbage or spinach leaves as a garnish. Serves 6 or 8.

SCRAMBLED EGG

- 1 egg
- 4 tablespoons milk
- 1 teaspoon butter
- Pinch of salt.

Melt butter in top of double boiler. Beat egg until light and add milk and salt. Put over boiling water until it thickens (about 20 minutes.) Do not stir. Lift once or twice with fork.

—M. P. Crawford.

ANNUAL MEETING OF EXTENSION WORKERS, MAY 21

TOWN CHAIRMEN AND PROJECT LEADERS MEET TO MAKE PLANS FOR 1929-1930

On May 21 all active Town Chairmen and women who have acted as Project Leaders meet at Essex Aggie for their annual business meeting. These are the women who cooperate with the Home Demonstration Agent and are largely responsible for the success of the Extension program. Each year the group grows. This year we have 63 Town Chairmen and 76 Project Leaders.

At the meeting May 21 reports will be given of work accomplished during the year. At the last County Home Economics Extension meeting it was voted that the Extension Committee be largely responsible this year for the reports. They will aim to make the reports "less statistical and more human."

Mrs. Annette T. Herr, our State Home Demonstration Leader, will be present, and also our specialists, Mrs. Haynes, Miss Foley and Miss Cooley.

—M. P. Crawford.

MRS. CANNON SPEAKER AT BETTER HOMES DAY, JUNE 12

We have been fortunate in obtaining Mrs. Cornelia Cannon, author of "Red Rust," as a speaker on Better Homes Day, June 12. She will speak on "Growing Up with Our Children."

—M. P. Crawford.

OH, MY, YES.

I've never seen a musty hen,
And never hope to see one;
But from eggs served now and then
I know that there must be one.

Do not think of your own faults; still less of others' faults; look for what is good and strong; and try to imitate it; your faults will drop off like dead leaves when their time comes.—*Ruskin.*

WHERE COTTON RULES

By SYLVIA SHARPLES

Homemaking Department

One day recently our Director, Mr. Smith, obtained permission from the officials and we were shown through the Naumkeag Cotton Mills. This is an opportunity given to only a few people, but as the superintendent told us they would be fully repaid if we all bought Pequot sheets and pillow cases when we are married.

After arriving at the mill we were divided into small groups of five and went through with an instructor. We started where the cotton arrives in bales and came out where the finished product does. I should hate to go through all the processes the cotton goes through.

We could well believe that the sheets would be serviceable and of fine quality after seeing the processes the cotton goes through. It is thoroughly cleaned, spun and woven. After being woven it is thoroughly examined and all defects picked out. If the defects are too bad the cloth is sent back. The only room that is at all unpleasant is the room where the cotton thread is starched and steamed. In this room the temperature must be nearly one hundred. It must take courage to work there all day.

One could not help but be impressed by the cleanliness, coolness, with the exception of the one room, and the general quiet and order of the mill. Not having been in any other mills of course I could not compare this one, but it seemed to me to have all the desirable qualities it would be possible to obtain.

One does not realize what famous industries are close to our own homes until given the chance to see them. Thanks to Mr. Smith and the officials of the mill we were given a chance to see a process we will never forget.

(Note.—The above was written by a student in the Homemaking Department after a visit to the Naumkeag Mills, in Salem.)

Members of the Class of 1929 will be grieved to hear that their friend and classmate, Ernest Nagee, 6 Tucker Street, Lynn, Mass., passed away at his home Tuesday, April 16. Ernest had been seriously ill for several months and was sent to the Massachusetts General Hospital with the hopes that under expert care he might be cured. The students and staff of the School extend their sympathy to his family in their bereavement.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 10

HATHORNE, MASS., MAY, 1929

NO. 5



A Room in the Demonstration Home of Mrs. Alvah J. Bradstreet of Danvers. All the furniture shown in the picture was renovated and refinished from information received in extension groups.

MRS. CORNELIA CANNON, NOTED AUTHOR, TO SPEAK

BETTER HOMES DAY, JUNE 12

Plans are nearing completion for our Annual Better Homes Day to be held at Essex Aggie on Wednesday, June 12. The morning program will be taken up with community singing and a pageant, "Down Petticoat Lane," given by the women of Newbury, under the direction of Mrs. Mary McIntire, Clothing Instructor. The 4-H Club girls, who have enrolled in the Cotton School Dress Contest, will exhibit their dresses on that day after they have been judged by Miss Cooley and Miss Forbes, State Specialists.

Those who enjoyed Miss Slattery so much last year will be glad to know that this year we have again obtained a fine speaker. Mrs. Cornelia Cannon, mother, writer, and fascinating speaker, will speak on "Keeping Up With Our Children." Those who have read Mrs. Cannon's last book, "Red Rust," will not want to miss hearing her speak.

As usual, exhibits illustrating work accomplished under the Extension Department will be in charge of women from various communities.

Food for the family will be in charge of the Beverly group. An exhibit of kitchen equipment "Then and Now" will be in charge of the Peabody women. Home Nursing will be in charge of the West Newbury group. One room will be arranged with furniture renovated by Extension groups from South Groveland, Newbury, Danvers and Beverly.

While invitations to Better Homes Day are sent to those women who have worked with the Extension Department during the past year, a cordial invitation is extended to all Essex County homemakers.

Marion P. Crawford.

CALENDAR

JUNIOR HIGH SCHOOL
FIELD DAY
Saturday, May 25

BETTER HOMES DAY
Wednesday, June 12

4-H FIELD DAY
Saturday, June 15

PARENTS' DAY
HOMEMAKING
DEPARTMENT
Wednesday, June 19

THE CHARM OF OLD THINGS MADE NEW

"O, won't you join a Better Kitchens group?" Just a telephone call from a neighbor who had been a project leader for various groups of homemakers, but it was the beginning of a fascinating year for the Bradstreet family. Mr. Bradstreet and I had waited twenty years for our new home—the house of our dreams—and now at last it was coming.

This kitchen improvement course, arranged by our Home Demonstration Agent and led by Mrs. Charles Turner of Beverly, opened my eyes to many possibilities for our new working quarters. At the meetings held in our own kitchens, we counted the unnecessary steps taken each day and multiplied that by 365, to see how many extra miles we walked in a year. Down on my paper plan went the handy dish slide, cold closet, ice chest, broom closet and cellar chutes for rubbish, waste paper and dirt. I chose a color scheme suggested by the chart. It proved to be perfect, (gray, blue and white with touches of rose). The built-in cabinets and high sink with stool have already saved me many a backache.

No sooner did we anticipate a problem than an Extension Course appeared again—like the "magic carpet"—to carry us over our difficulties. In the first place, I was puzzled how to furnish the large new living-room. I pulled out from its hiding place a century-old, lyre-shaped, tip-top table of San Domingo mahogany that some ignorant painter had varnished and shielacked until the two leaves fairly stuck together. Then there was a dear little Martha Washington sewing stand, with the drop leaves that had been painted first red, then white. The gilt-framed mirror with the old ship painting and the thirteen balls, standing for the thirteen colonies, had always hung around somewhere. I viewed these with despair and wondered whatever to do with the old colonial chair, with the tacks still sticking out, that had held the velvet in place over a worn-out rush bottom. Then from Miss Marion Parker, Town Chairman of Beverly, came the announcement "Furniture Renovation Class" and these three words ushered in the "magic carpet" that carried me in imagination to a

(Continued on page 4)

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CALENDAR

May 25—Junior High Field Day at Hathorne.
June 12—Better Homes Day at Hathorne.
June 15—4-H Field Day at Hathorne.
June 19—Parents' Day, Homemaking Department.
June 21—Homemaking Department closes for summer.

EDITORIAL

Twenty-three percent of the alumni have replied to the recent questionnaire sent out from Director Smith's office. Of the 480 graduates we have received only 111 replies, 57 from the agricultural and 54 from the homemaking graduates. In future issues of the *Farmer and Homemaker* we expect to devote more space to Alumni Notes. Every alumnus can help in this by filling out the questionnaire and mailing it to the school.

PROJECTS V A R I E D A N D INTERESTING WRITES MEMBER OF PRIZE COMMITTEE

For several years I have had the pleasure of serving as a member of the Bauer Prize Committee of the Essex County Agricultural School. One of the duties of this committee is to visit ten to fifteen of the best projects during the summer. The projects are located in all sections of the County and are often quite varied.

The project may be on a dairy farm, where the boy has charge of a herd. He must keep in mind that quantity production is desired without sacrificing quality.

Another project may be in poultry, starting with the care and feeding of day-old chicks, the student builds up a flock of high producing pullets, possibly sheltered in a house of the student's own construction.

It may be a project in a green-

house on one of the private estates along the North Shore, or a floriculture project carried on by a student who is building up a business of his own.

The student may be interested in establishing a fruit orchard. He starts by budding choice varieties on stocks, thus raising his own trees. In this way he will have a more personal interest in the trees than if he had purchased them from a nursery.

A vegetable garden project is required of the first year students.

When the Bauer Committee visits the project, the student explains his work to the committee. If a garden project, the committee will want to know the varieties planted, fertilizers used, methods used for disease and pest control, marketing of products and other factors. It will also want to view the records and accounts of the students.

If one of these Bauer Prize Winners or a champion in the 4-H Clubs of Essex County would talk to your Grange or church club on "What I Have Done and How I Did It" you will renew your interest in the youth of Essex County and your enthusiasm in Essex County products.

Joseph N. Dummer,
Lecturer Essex Pomona.

ALUMNI NOTES

We have had many interesting letters from members of the Alumni in reply to the questionnaire sent out on April 25th. Besides answering the questions, many wrote additional notes and letters telling us more in detail what they have done or plan to do. These letters are most welcome and help us greatly in keeping our information up to date.

About one-fifth of the Alumni have replied to date, and we strongly urge that the others make returns soon, as summer is the time when a large number of graduates call at the office and ask for data about classmates and friends. If anyone has failed to receive a copy of the questionnaire or has misplaced the one sent, we will be glad to forward another upon request.

We can print only a limited number of returns in this issue.

BAINES, HOWARD L., '23, retailing poultry and eggs; address 53 King St., Swampscott.

CRESSY, ALDEN F., '23, poultry manager at Three Bridges, N. J.

CUTRAN, JAMES H., '24, student, floricultural course, M. A. C.; lives at 35½ Hobart St., Danvers.

DANFORTH, ASH F., '28, landscape gardening at Winter Garden Ornamental Nurseries; address c/o Mrs. Jacobs, Winter Garden, Florida.

IVES, LEONARD B., '20, head gardener and nurseryman on Gove Es-

tate; lives at 12 Clifton Ave., Salem, and is married.

JACKSON, ALFRED H., '21, pasteurizing and milk testing for H. P. Hood & Sons; lives at 10 Market St., Lawrence; married and has one child.

JOHDAN, WILFRED, '24, working with test cows on Argilla Farm; address, 11 Lafayette St., Ipswich.

KILLAM, DWIGHT L., '18, general farming; married and lives in East Boxford.

LEE, PHILIP A., '21, poultry breeding business in Waldoboro, Maine.

LEWIS, ROBERT T., '25, tree surgery; address c/o Day Tree Expert Co., Kent, Ohio.

LORD, JAMES R., '21, herdsman; married; address, Craigland Farms, Carmel, New York.

LOVETT, JOHN H., '18, ice cream business for self; lives at 14 Ashland Place, Gloucester, and is married.

PEABODY, PHILIP F., '22, farm manager; address, Box 1076, North Warren, Penna.

PHIPPS, CARL D., '21, orchardist on Chedco Farm and lives at 52 Church St., Hudson.

REED, FREDERICK H., JR., '26, orchard foreman on Turner Hill Farm; address, Argilla Rd., Andover.

RIPPON, GEORGE L., '26, orcharding; lives at 364 Porter St., Melrose, and is married.

ROBERTS, MAXWELL S., '23, foreman, wholesale florist; address, Bridgewater Inn, Bridgewater, Mass.

RYAN, PARKER, '24, dairy chemist, H. P. Hood Co., Lynn; address, 425 Essex St., Swampscott.

SHUTE, HORACE J., '27, Country Club Agent for Essex County; address, 48 East High St., Newbury.

SMITH, HENRY L., '28, greenhouse work; address, 78 Appleton St., Malden.

STANTON, CARL, '16, landscape architect; address, Peterborough, N. H.

STEVENS, RAYMOND L., '22, estate superintendent; address, Milton St., Hyde Park, and is married.

STICKNEY, GEORGE W., '26, poultry work in Wiscasset, Maine.

TIBBETTS, CLARENCE A., '27, pasteurizer at Lyndonville Creamery; lives at 41 Kondazain St., Watertown, and is married.

TODD, RANDOLPH H., '18, manager of stock department of International Harvester Company in New York City; address, 44th Road at Vernon Blvd., Long Island City, N. Y.; married.

TUCKER, F. MAYNARD, '20, market gardening at 85 Wheeler St., Gloucester; is married and has two children.

VAUGHAN, AUBREY D., '26, herdsman, Bristol, R. I.; c/o R. I. Soldiers' Home.

WALKER, FREDERICK H., JR., '27, student at Kansas State Agricultural College, Manhattan, Kansas.

(Continued on page 4)

MASSACHUSETTS ROADSIDE STAND ASSOCIATION

Rules and regulations for the Farmers' Roadside Stand Association of Massachusetts have been changed this year. Under the new rules any farmer in Massachusetts is eligible to membership.

Members may sell products grown on their own farms or purchased from neighboring farms. No produce shall be represented to prospective customers as "home grown," "locally grown" or "neighborhood farm products" unless produced within the immediate neighborhood.

Members shall pack all their produce, whether graded or ungraded, so that the surface will be truly representative of the whole pack. Any instance of misrepresentation of produce to a customer or of dishonesty or of unfair business practice shall be considered sufficient cause for expulsion from this association.

Stands used by members shall be clean, neat and attractive. All products sold at members' stands must be of good quality, fresh and in otherwise good condition.

Stands shall be subject to inspection at any time.

The officers for 1929 are: President, H. G. Turner, Andover; Vice President, H. N. Caldwell, Littleton; Secretary, C. M. Stearns, Danvers.

C. M. Stearns.

FARM AND HOME WEEK AT M. A. C.—JULY 23-26

Ten programs (homemaking, fruit, poultry, forestry, cash crops, home gardening, home canning, livestock, dairying, and beekeeping) are scheduled for this year's Farm and Home Week at the Massachusetts Agricultural College, July 23-26, 1929.

DALLAS LORE SHARP

On the general program for Thursday evening will be Dallas Lore Sharp of Hingham. "Five Days and an Education," or a protest against standardization and quantity production in education, will be the subject of Mr. Sharp's talk.

HOMEMAKERS

On the homemakers' program will be Dr. Ruth Wheeler, nutrition specialist of Vassar College; Mrs. Anna Jones, child training specialist from Iowa State College; Mrs. Ida Harrington of Providence, Rhode Island; Miss Lucile W. Reynolds, former state leader of home economics extension work in Massachusetts and now on the staff of the Iowa State College; and Rev. John Nichol Marks of Arlington.

FRUIT

Massachusetts fruit men will be featured on the fruit program, these men speaking on their own particular work. Joseph L. Kelly, East Wareham, will lead a discussion on blueberry culture. A round table discussion of small fruits will be led by S. L. Davenport, North Grafton; C. S. Graham, Holden; and James W. Dayton, assistant county agricultural agent of Middlesex County.

POULTRY

Prof. T. B. Charles, head of the Poultry Department, University of New Hampshire, will be one of the main speakers.

FORESTRY

The forestry program, which is a new one for Farm and Home Week, will have as a speaker, W. H. Walker, Greenwich Village.

CASH CROPS

Cash crop farmers will hear W. H. Wolf of the Riverdale Market Garden, West Springfield, who was formerly assistant horticultural specialist at the New Hampshire Experiment Station.

FLORICULTURE

"Say It With Flowers" is one of the three lectures which will be given by Emil C. Colz, professor of floriculture at Iowa State College.

HOME CANNING

Home canners will hold discussions on new equipment and processes, a round table discussion led by A. W. Clapp, Weymouth, and a lecture by Mrs. Roberta Forgie, West Newbury.

LIVESTOCK

The livestock program will include E. F. Richardson, director of the state Division of Animal Industry, Boston; R. L. Benson of New Jersey, who will speak on abortion; and Dr. J. B. Leutz of M. A. C.

DAIRYMEN

Speakers for the dairymen will include W. P. Davis, general manager of the N. E. M. P. A., and some member of the milk dealers' association.

BEEKEEPERS

Beekeepers will hear Prof. F. E. Millen of Ontario Agricultural College, also J. H. Merrill of Raynham.

Other speakers on various programs will be announced later and complete programs may be obtained by writing to Earle S. Carpenter, Mass. Agricultural College, Amherst, Mass.

The New England Institute of Cooperation will hold its third annual meeting at Burlington, Vermont, on June 20, 21, 22.

Big Brother "Bob" Emery of Station WEEI will entertain members of Middleton Grange and their friends at an open meeting on the evening of June 12 at the School.

DAIRY HERD IMPROVEMENT ASSOCIATION REPORT FOR APRIL

The Essex County Dairy Herd Improvement Association reports nine cows sold as not profitable during the month of April. There are 23 herds containing 513 cows. The tester, Robert Bill of North Andover, is a graduate of the Essex County Agricultural School. He visits each herd owner once a month, samples the milk, weighs it and secures weight of grain, hay and other roughage fed each cow. After staying over night, he gets weight and samples of milk from each cow again and tests for butterfat during the forenoon. He charges \$4.25 per month for this service.

The highest producing cow for April was Anna, a purebred Holstein owned by Dana Bragdon of Methuen, with over a ton of milk, or 2094 pounds.

The members of this county organization are: President, Charles Moxley, North Andover; Vice-President, John T. Chadwick, West Buxford; Secretary-Treasurer, F. C. Smith, Hathorne; Mrs. William Wood, Hathorne; Harvey Turner, Andover; James Clark, North Andover; I. H. Sawyer, Topsfield; Herbert Carter, Andover; Chester Abbott, Andover; Dr. Joseph Kittredge, North Andover; W. D. Bragdon, Methuen; Frank Webster, Methuen; Fred Miller, Methuen; Clover Farm, Andover; Robert Sawyer, Bradford; Chauncey Gleason & Son, Haverhill; Kimball Ayrshire Dairy, Haverhill; Gilbert Tucker, West Newbury; Maynard Lane, Ipswich; M. A. Askman, Beverly; S. P. White, Andover; W. B. Corliss, Andover; Louis Bourdelais, Andover; Frank Donovan, Andover; Napoleon Simon, Salem; Sorois Farms, Marblehead.

CAMP BAUER

The boys working on the School Farm are now comfortably quartered in the old Homemaking School in the room formerly used as an assembly hall. This old building has been put to many uses since the fire three years ago and now it is used as headquarters for Camp Bauer. Mr. Raymond Yerrington of Norwich, Conn., who was trained at the V. M. C. A. College in Springfield has been employed as substitute camp counselor until June when Douglas Sutherland of the same college will take up his duties at the School.

Andrew Coukos, '25, is a senior at M. A. C. Coukos is said to be the only three-letter man now at that institution, having won his letter in football, basketball and track. Coukos holds the M. A. C. record for the discs throw.

THE CHARM OF OLD THINGS MADE NEW

(Continued from page 1)

large and comfortable colonial living-room, and on through the other eight rooms of the new house. It took me to the store-room of the old farm house and to the attic of the disused milk room. It was here that I found two old bow-end beds (minus the sides. I was learning not to mind the old paint that could be easily taken off with hot lye water, nor long cracks that could be filled with plastic wood and painted or stained.

On one of my "magic carpet" trips to an antique shop I came across the sleigh-front bureau (pictured above). Varnish remover, wire wool, gasoline, linseed oil and turpentine with boiled oil feedings and polishings have revealed a beautiful satiny grain under the dull varnish.

Then last, but not least, the living-room! It has fulfilled every fond hope I had for it. With the help of Mrs. Harriet Haynes, State Home Management Specialist, and Mrs. James Foster of Beverly, as leader of the group, every old piece has been made wonderful, even the Governor Winthrop desk—to which I must give another rub. But the charm of these lovely old pieces would be lost without a proper setting. And here again the "magic carpet" this time in the form of a course of meetings conducted by Miss Crawford, our Home Demonstration Agent, at the Beverly Public Library on "Living Room Improvement." It was here that my inspiration came for the beamed ceiling, oak floor, chair rail, suitable paper and draperies, rugs and cheerful groupings of furniture. The only accessories bought new for this room were two inexpensive blue pottery jars, but they carry out a deep blue touch in the paper and really add to the beauty of the room.

All the family have enjoyed working for the new home. It was at the suggestion of Miss Parker that we opened our new house to the public during Better Homes week as the Demonstration Home for Beverly and Danvers, and we took great pleasure in showing over 700 people through the house and grounds.

—Bertha Lovett Bradstreet.

HOMEMAKING DEPARTMENT—PARENTS' DAY WEDNESDAY, JUNE 19

On June 19th the Homemaking Department will hold its annual Parents' Day. We cordially invite the parents of all our students and any interested friends to visit the School on that date. In the morning there will be exhibitions of the work of the girls and at noontime a social hour following the basket lunch

which everyone is urged to bring. There will be no lunches served at the School. In the afternoon Miss M. Sylvia Donaldson, Representative from the Ninth Plymouth District and a well-known educator, will speak to the members of the graduating class. Undergraduates, parents and friends are cordially invited to hear Miss Donaldson, who is sure to have a real message. The day's program will be brought to a close by a short, one-act play entitled "The Essex Shoppe."

ESSEX COUNTY 4-H COTTON SCHOOL-DRESS CONTEST

During the early spring twenty-five 4-H Club girls of Essex County have been learning to make attractive cotton school dresses.

Some of the things which these 4-H Club girls have been considering particularly are choice of pattern, color, line, and design, as well as seam finishes and types of hems suitable for cotton dress materials.

These girls will enter their dresses in a county contest on June 12, in connection with Better Homes Day of the Essex County Agricultural School Extension Service. At this time the dresses will be judged on the girls by Miss Esther B. Cooley, State Clothing Specialist, and Miss Marion E. Forbes, Assistant State Club Leader in 4-H Club Work. Miss Cooley and Miss Forbes are from the Massachusetts Agricultural College Extension Service.

The girls' dresses winning the first three prizes in the county contest will be eligible for prizes in the State Cotton School Dress Contest held in July at the 4-H Club Camp at M.A.C.

—Horace Shute,
County Club Agent.

JUDGING CONTEST WINNERS

Arthur Gordon of Rowley and Robert Winkley of Newburyport were the highest individual point winners in the fruit and milk judging contests held at the Massachusetts Agricultural College, at Amherst, on May 3 and 4. Arthur Gordon made a perfect score in fruit judging, winning a silver cup presented by the Massachusetts Agricultural College. Robert Winkley also received a silver cup, presented by the State Department of Agriculture for the highest score in milk judging.

In addition to the highest individual prizes, the Essex Aggie milk judging team, composed of Robert Winkley of Newburyport, Charles Elwell of Byfield, and Lawrence Westcott of Melrose, won first team prize.

In fruit judging, a team composed

of Arthur Gordon of Rowley, Ernest Blaney of Cliftondale, and Bradford Webb of Andover, won third team place.

Clifford Bryer of Cliftondale won fourth place in the annual prize speaking contest for agricultural students.

ALUMNI NOTES

(Continued from page 2)

WILSON, HAROLD A., '24, entomological work at Market Garden Field Station, Waltham; lives at 24 Fletcher Ave., Lexington, and is married.

HOMEMAKING DEPARTMENT

ADAMS, BARBARA, '23, dental assistant in Amesbury, and lives at 3 Fruit St., Newburyport.

ANDERSON, GLADYS G. (MRS. STILLMAN E. CHUBBUCK), '21, now lives at 38 Mar Vista Ave., Pasadena, California.

BOUSLEY, LUCINDA D., '16, school nurse and teaching nursing at Essex Aggie; address 22 Cherry St., Danvers.

DECRAKEY, ALICE G., '23, household assistant at 40 Cushman Ave., Revere.

ESTES, RUTH T., '19, head of Home Economics Department at Southern College, Petersburg, Virginia.

GARLAND, DORIS J. (MRS. CLARENCE A. TIBBETTS), '25, at home, 41 Kondazain St., Watertown.

GRIFFIN, E. DORIS, '27, assistant in tea room; address 8 High St. Ct., Rockport.

HENDERSON, HAZEL, '26, at home, 27 Hawley St., Lawrence.

HULSMAN, GLADYS H., '24, nursing at Lynn Hospital; address 25 Rand St., East Lynn.

RICHARDSON, VIOLA M., '26, training at Anna Jacques Hospital, Newburyport.

RIX, EMMA L. (MRS. HAROLD J. ARTHUR), '25, at home, 33 Bates St., Danvers.

ROSS, ELVA E., '28, student dietitian at Addison Gilbert Hospital, Gloucester; address 14 Arlington St., Amesbury.

ROWE, MARJORIE N., '23, teaching, Mather Industrial School, Beaufort, South Carolina.

RUSSELL, MILDRED L., '28, household assistant at 39 Sea View Ave., Beach Bluff, Box 75.

STANLEY, GLADYS C., '28, dietitian; address 481 Elliott St., Beverly.

UPTON, GRACE (MRS. JAMES A. MORRISON), '22, at home, 22 Grace Rd., West Medford.

WALKER, ESTHER M. (MRS. RUSSELL A. WALKER), '21, at home, 68 Richardson Rd., East Lynn, and has three children.

WILKINS, BERTHA W., '25, assistant dietitian at Mass. Homeopathic Hospital in Boston; address 23 Barr St., Salem.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 10

HATHORNE, MASS, JUNE, 1929

NO. 6

STUDENTS PLAN AND CONSTRUCT USEFUL EQUIPMENT IN FARM SHOP

The illustrations on this page show the work of two of our students in the Farm Shop. We think that it is quite an unusual thing to have a young girl construct a wheelbarrow for use on her father's farm. It is also quite exceptional to have a young man, who lost his arm four years ago, make the best stepladder in the Farm Shop during the year. The instructor of woodworking, Mr. F. R. Hardy, vouches for the fact that the entire construction of the two articles, even to making the wheel, was done by the students without any help from him or anybody else.

Miss Gertrude Colby came to this School from Newbury. She is taking a three-year course in agriculture, and has successfully completed the first year's work. She is now at the home farm, carrying on a project in vegetable gardening and helping with the general farm work. Recently she won a prize of \$20.00 for writing the best essay on "What I Learned at an Agricultural Fair," in a contest conducted by the Massachusetts State Fair Association. In addition to her home and school work, she is an earnest worker in the 4-H Clubs of Newbury.



HARRY GREEN OF ROCKPORT

Harry Green entered this School last September, from Rockport, and is very much interested in floriculture and ornamental gardening. This summer he is employed on estates near his home doing general gardening work.

These two students have shown unusual ability in woodworking and are keenly interested in agriculture.

AGGIE SENIOR ANSWERS QUESTIONS OF PROSPECTIVE STUDENT

I hear that you are going to the Essex County Agricultural School at Hathorne.

Yes, this is my last year.

What does it cost to go there?

It is free to boys and girls in Essex County. There is no charge for books and even a part of the car fare is returned to the student.

What are the entrance requirements?

Any boy or girl who is fourteen years of age and a graduate of the eighth grade and of good moral character, may apply for admission. With two or more years of high school training the prospective student may be admitted to the three year course.

What studies do you have at the Agricultural School?

In addition to the Agricultural studies, which include Large and Small Fruits, Poultry, Dairying, Farm Crops, Small Animals, Vegetable Gardening, Ornamental Gardening, Forestry, Beekeeping, and Floriculture, there are courses in English, History, Science, Citizenship, Geography, Arithmetic, Farm Management, Agricultural Survey, Marketing, Mechanics and Hygiene.

I am interested in football. Do you have athletic games at Aggie?

I guess we do, and a great many of them in football, basketball and hockey. Many of the boys and girls go in for the track events. There is a well organized program for the physical development of all students.

You spoke about the courses in fruit, poultry, gardening, etc. Can a student take anything he likes?

Yes, with but few exceptions. During the first year everybody takes vegetable gardening, as we farmers consider that a good place to begin the study of plants, soils and fertilizers. After the first year, most of the agricultural courses are elective.

Does a student get a chance to really work, or does he just study from a book?

That is a good question. The word "vocational" means—training for the job. A vocational school should teach a student to do real jobs under conditions actually found in real life and according to the highest standards of the vocation. A visitor to the School would soon observe that all students have the opportunity to learn agriculture by actually participating in the work.



GERTRUDE COLBY OF NEWBURY

(Continued on page 4)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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CALENDAR

- June 19—Parents' Day, Homemaking Department.
July 1-5—National Home Economics Convention, Boston.
July 9-12—Mass. Fruit Growers' Association Tour.
July 23-26—Farm and Home Week, Amherst.
July 30-Aug. 2—Agricultural Teachers' Conference, Norfolk County Agricultural School, Walpole.
Aug. 7—Market Gardeners' Field Day, Waltham.
August 9—Mass. Fruit Growers' Association Meeting at Marlboro.
September 3—Opening day of School for new students.
September 11-14—Topsfield Fair.

ALUMNI NOTES

We have had a generous response to the letter, recently sent out from Director Smith's office, requesting addresses and occupations of our graduates. The object of the letter was to secure up-to-date information concerning every alumnus of this School for office records.

The information already sent in will be published in this and future issues of the *Farmer and Homemaker*. Graduates who have not replied should send in their mail and business addresses and occupations at once.

HOMEMAKING DEPARTMENT

BROWN, ELIZABETH (Mrs. Stensrud), '20, lives at 15 Minerva Street, Swampscott, and has two children.

BURBINE, STELLA R., '25, student at Framingham Normal School, and lives at 9 Somerset Ave., No. Beverly.

BURNETT, IRENE M., '23, Sears-Roebuck Company, Boston; address, 145 Lewis St., Lynn, Apt. 22.

BURRILL, DOROTHY L., '28, clerk in manufacturing company in Amesbury, and lives at 61 Orchard Street, Amesbury.

DAVIS, VIRGINIA P., '25, art work in New York; address, West Newbury.

DEVENS, NETTIE E., '27, dietitian, and lives at 3 Pine Crest Ave., Amesbury.

DONAHUE, DOROTHY M., '27, at home, 69 Lexington St., Lawrence.

EMMIET, ELLA B. E., '28, household assistant at 7 Alden St., Danvers.

ERICKSON, RUTH C. (Mrs. Palmer J. Long), '26, 42 Osgood St., South Lawrence; has one son.

ESTEY, FLORENCE S., '22, stenographer, address, 6 Butler Ave., Danvers.

FOSTER, VIOLA H., '20, at home, has three boys; address, Massachusetts Avenue, Lunenburg.

GLAVIN, MARJORIE L. (Mrs. Kenneth F. Briggs), '21, at home, 48 Pearl St., Amesbury, and has two boys.

GRAY, ALICE B., '20, clerical work in Boston; address, 209 Atlantic Ave., Marblehead.

GREENLEAF, PHYLLIS (Mrs. Ellis), '26, housekeeper, 15 Sherman St., Lexington; one daughter.

HILBERT, GLADYS M., '27, graduate Boston Cooking School; address, 607 Howard St., Lawrence.

HODGES, EDWINA (Mrs. Irving R. Libby), '18, at home, 15 Pond Street, Marblehead, and has two girls.

LEWIS, HELEN M., '20, housekeeper, 90 Shawsheen Road, Andover.

LYNCH, GERTRUDE P., '28, at home, 28 Chapel St., East Gloucester.

MARTIN, FRANCES S. (Mrs. Arthur M. Harris), '24, at home, 5 Plumb Lane, Nantucket.

MARTIN, GERTRUDE B. (Mrs. Howard Martin), '22, at home, Borderline Farm, Middleton.

MILLER, IDA E., '28, at home, 31 Kendall Street, Lawrence.

MURPHY, ELEANOR E., '21, teaching school; address, 50 Prospect St., Georgetown.

NORMAN, RUTH M., '27, hairdresser; address, 17 Turkey Shore Road, Ipswich.

PERKINS, MARGUERITE M. (Mrs. Edward B. Armour), '23, at home, 10 Wilson Terrace, East Lynn.

RICE, H. EVELYN, '24, cafeteria and planning to open a tea-room to be known as the Ho Ho Kus Tavern on main Road between New York City and Albany; address, c/o Y. W. C. A. Cafeteria, Wilmington, Delaware.

RIGGS, EDITH (Mrs. Frank O. Robson), '19, at home, 66 Summit St., Newton; two children.

ROWELL, ADDIE L., '22, student at Framingham Normal School; address, 37 Dwinells St., Groveland.

STANLEY, MARJORIE L., '22, Daniel Low's, Salem; address, 24 Vineyard St., Danvers.

SCHOOL NOTES

Douglas Sutherland, of Waterbury, Connecticut, has been engaged as Counsellor of Camp Bauer for the summer season. He reports for duty on June 15.

Mr. Yerrington, who has been acting in that capacity for the past month, will join the Taft Athletic Association of Norwich, Connecticut, where he will play semi-professional baseball.

C. M. Stearns, Secretary of the Farmers' Roadside Stand Association of Massachusetts, addressed the radio audience on Thursday, June 13, at 12:40 P. M. over WBZ. His topic was "The Farmers' Roadside Stand Association for Farmers and Consumers."

CAMP BAUER BOYS, 1929

Floriculture—Alfred Thompson, Amesbury; Thomas O'Shea, Salem.

Dairy—William Hay, Lawrence; Lawrence Westcott, Melrose; Milton Snow, Lawrence.

Fruit—Bradford Webb, Andover, Ernest Blaney, Cliftondale.

Poultry—Nathaniel Hart, Lawrence; David Fisher, Saugus.

Ornamental—Everett Bean, Haverhill; Kenneth Sprague, No. Andover; Herbert Bailey, Merrimacport.

Vegetable Garden—Joseph Mahoney, Salem; Carleton Symmes, Saugus; Loring Clark, Marblehead; Philip Menard, Saugus; Irving Day, Hathorne.

STAFF CLUB OUTING

On June 8 the Staff Club of the School went on an outing to Mount Agamenticus in the Village of York, Maine. Seventy people with Director and Mrs. Smith made the trip by automobile. After luncheon on the mountain, the party continued to Cape Neddick and home by way of York Beach.

STEPHENSON, MARY E. (Mrs. Joseph E. Tremblay), '19, at home, Main Street, Shirley.

SUTTER, EDITH (Mrs. Santaacross), '23, address, 1 Quincy Park, Beverly.

TIPERT, JOSEPHINE C. (Mrs. Alexander Burt), '23, at home, 44 Lighthouse Street, Lynn.

WILKINS, GERTRUDE M. (Mrs. Clarence J. Castle), '22, at home, Lock Box No. 32, Topsfield; one son.

WRIGHT, CHARLOTTE A., '24, household assistant; address, 9 Fruit Street, Newburyport.

WYMAN, RUTH E. (Mrs. Roland Smith), '21, died August 18, 1927.

COCCIDIOSIS. SYMPTOMS, TREATMENT AND PREVENTATIVE MEASURES

There are many things about this disease still among the unknown, but this fact should not stop poultrymen from doing the things that are known to be a help in preventing the disease, first of all, and secondly, practising methods of control that are giving reasonably good results.

No one can sit back and say that his birds are immune. Birds in new houses, on absolutely new land, come down with this disease. Birds of the air have been found to be carriers of the disease, spreading it wherever they fly.

SYMPTOMS

Chickens may be affected at any age, from four weeks to fifteen weeks of age. Loss of color or pigment around the head and shanks; loss of appetite; craving for heat; eating the poultry droppings and filth; ruffled or unkempt appearance of the feathers, are all symptoms. Bloody droppings and then death are later symptoms.

TREATMENT

Consists of "flushing" or physicking the birds to wash out the coccidia germs lodged in the intestinal tract.

We recommend the following: Start a preventative flush of 20% dried skim or buttermilk at four weeks of age. This means taking 80 pounds of whatever mash you may be using and adding 20 pounds of the milk to it, regardless of any milk there may be already in the mash mixture. Feed this and nothing else for four days. Repeat this treatment again at eight weeks and again at twelve weeks.

For birds that are actually sick with the disease a 40% milk flush must be used for the four-day period.

If more convenient, semi-solid buttermilk may be used. Take away all feed. Keep semi-solid before the flock all the time for three or four days, feeding a small amount of scratch grain late in the afternoon.

Always clean out brooder house and any chick runs or platforms thoroughly at the end of the four-day period.

PREVENTATIVE MEASURES

Are all summed up in the one word Cleanliness.

All houses, platforms, drinking and feed utensils, should be thoroughly washed with hot water and lye at the rate of one pound of lye to 40 quarts of water. Then spray with the only disinfectant known that will kill coccidia germs—Iodine Suspendoid. Use this iodine spray at the rate of one quart to 19 quarts of water.

Use shavings for litter and remove

and sweep coop clean once every six days. Never let chicks out on old land, but use platforms until they go on a summer grass range.

This disease is very prevalent in this county at the present time and we advise you to watch your flocks carefully for symptoms and to treat all young stock with a preventative flush.

Note—About once a month the Poultry Division of the School, co-operating with the County Agent, prepares a Poultry Dope Sheet for the benefit of the poultry industry. Any interested poultryman may secure these by sending name and address to the School. The above was issued under date of May 15.

FARM AND HOME WEEK

JULY 23-26, 1929

Farm and Home Week is the time when those engaged in some type of farming, and also farm housewives, meet at the College for a few days to study the latest developments in the subjects in which they are particularly interested.

FOR MEN

Programs will be held for the men on fruit, cash crops, livestock, home gardens, dairying, bookkeeping, poultry, and forestry.

FOR WOMEN

In addition to the regular home-making program, which includes such subjects as vegetables, preparation of one-dish suppers, literatures for children, clothing styles, and recreation in the home, the women will also find the food preservation and the home gardening programs of interest.

Complete programs may be obtained by writing to Earle S. Carpenter, Massachusetts Agricultural College, Amherst, Mass.

BETTER SCHOOLS

Better Schools is the title of a recent book by Carleton Washburne and Myron M. Stearns, published by John Day Company, Inc., New York. Mr. Washburne is Superintendent of Schools at Winnetka, Illinois, where his experimental work on individual technique has attracted national attention. Mr. Stearns, in writing on education for magazines, has inspected school systems in all parts of the United States.

The purpose of the book is to offer practical suggestions to teachers, superintendents and others interested in progressive methods and the improvement of school systems.

TRAINING STEERS TO THE YOKE

(From a Weekly Report)

Perhaps you would like to know how I train steers to the yoke. To do this a man must have plenty of patience, be firm but gentle. My partner, Mr. — and I, decided that we could use a yoke of steers to be the motive power in cultivating our field of squash. We discovered two steers in the last shipment which were the same color, size and shape.

I yoked them together and drove them for three miles. To urge them on I would tap them on the back with a goad, and to slow them up tap them on the nose. By gently blowing in their nostrils they would have confidence in me. To turn to the right, tap the off steer on the nose and let the high one advance, and to turn to the left, vice-versa. When I got home they were fairly well trained and obedient.

R. Ellis, '29.

CAMP BAUER

The Camp Bauer boys have organized a baseball team and have already played a series of six games with teams representing the Prison Camp, Danvers State Hospital, and Cherry Hill Farm. The last three games, with each of the above teams, have resulted in victories for Camp Bauer.

The lineup and schedule to date follows:

Bradford Webb, second base
Horace Shute, catcher
Harold Mostrom, first base
Raymond Yerrington, shortstop and pitcher.
Philip Cough, pitcher and shortstop.
Carleton Symmes, catcher and third base.
Joseph Mahoney, first base and left field.
Philip Menard, right field
Ernest Blaney, left field and center field.

Bailey, Clark, Bean and Hart are used as utility men.

SCORES OF GAMES PLAYED

Prison Camp	7	Camp 6
Prison Camp	14	Camp 8
Danvers State Hospital	12	Camp 4
Cherry Hill Farm	8	Camp 9
Cherry Hill Farm	5	Camp 10
Prison Camp	6	Camp 10

Raymond Yerrington,
Camp Counsellor.

Palmer Perley, '27, of Rowley, has established a business on the Shore Road under the name of Bay Road Gardens. He specializes in the growing of annual and perennial plants and is also engaged as a landscape gardener.

The engagement of Miss Lillian E. Pooler to Mr. Clifford G. Sewell of Lynn, Class '27, has been announced.

BETTER HOMES DAY A SUCCESS

The School hall was taxed to capacity during the Better Homes Day program carried out by the women's section of the Extension Department under the direction of the Home Demonstration Agent, Marion P. Crawford, and her assistants. The morning program was opened by Miss Marion Parker of Beverly, Chairman of the Extension Committee. The Home Demonstration Agent then outlined the work for 1929. A pageant entitled "Down Petticoat Lane" was presented by an extension group from Newbury. It contrasted in a pleasing way the manners and costumes of years ago with those of today. One of the dresses which attracted attention was that of the Revolutionary period.

The morning program closed with a cotton school dress contest for 4-H Club girls. This was won by Viola Messer of Methuen, and the 4-H Club Health Poster Contest was won by Aldona Paplaskas of Methuen.

The afternoon program was opened by the Glee Club of the Danvers Women's Association, before an audience which again filled the main hall. The roll call by towns showed the largest number from Saugus. May E. Foley, State Nutrition Specialist, Esther B. Cooley, State Clothing Specialist, and Verna Payson, Agent of the State Department of Education, then addressed the group. The speaker of the afternoon, Mrs. Cornelia J. Cannon, was then introduced. Her topic, "Keeping Up With Our Children," proved to be a frank talk on the modern home and the parents' duties to their children.

The exhibits and demonstrations proved unusually interesting this year and were in charge of the following extension groups.

Nutrition—Beverly.

Home Nursing—West Newbury.

Kitchen Equipment—Peabody.

Furniture Renovation—Danvers, Beverly and South Groveland.

The success of the program is due to the increasing number of Essex County women becoming interested in extension work, and the enthusiastic support of groups throughout the county.

—Marion Crawford.

PREPARED BY MAY E. FOLEY, STATE NUTRITION SPECIALIST

Question: Should a child have a hot cereal every morning, even in the summer time? Mine get very tired of oatmeal. Should I insist that they eat it?

Answer: By all means vary the cereal served, and use a cold one oc-

asionally if the children prefer it. Shredded wheat or muffets, served with either hot or cold milk are relished by most children, and are very nutritious. Serve the milk in a pitcher and let the child serve himself. Some new brown rice flakes recently put on the market are excellent with either hot or cold milk. Some of the other prepared cereals may be used also for a change, but we must always keep in mind that cereals made from whole grains are best, and that prepared cereals always cost more than the uncooked. Some mothers mix two or three cereals together. A good combination is one part cornmeal and two parts each of oatmeal and wheatena or some other dark cereal. Occasionally an egg or crisp bacon may be served and the cereal omitted.

NEW EXTENSION SPECIALIST APPOINTED

Mrs. Ruth D. Morley, of Grant Haven, Michigan, has recently been appointed as Extension Specialist in Child Development and Parental Education, and will begin her work in Massachusetts this month.



MRS. RUTH D. MORLEY

She is a graduate of the Home Economics Course of the Michigan State College, has taught in high schools in Michigan and Indiana, and for the past three and a half years has been the Home Demonstration Agent in Ottawa County, Michigan.

This field of extension teaching is a comparatively new development, but because Mrs. Morley is a homemaker and mother of two children, she is well trained and prepared to help the mothers of our State.

(Continued from Page 1)

I have heard that you have very good times at that School.

Why, yes, there are several afternoon socials and evening dances. Then we have entertainments given by the different classes to which the faculty and students are invited. In addition to the social events, we have assembly programs about once a month throughout the school year. Possibly the best event of the year is Graduation, with exercises for the graduating class in the afternoon, followed by the business meeting, banquet and dance of the Alumni Association.

From what you say about the School, I think it must be a fine place to go.

It certainly is, but there are many more things which help to make school life more enjoyable. For instance, groups of students are organized into clubs. There are clubs for those interested in Floriculture, Bees, Stock Judging, Public Speaking, Dramatics, School Year Book and Athletics. A Glee Club and Orchestra are organized early in the fall.

When do you have time for all of these things?

Classes begin at 9:00 A. M. and close at 3:30 in the afternoon, but many of the students stay until 4:30 or even 5:00 o'clock.

That makes rather a long day.

Yes, but remember we have only six months of classroom work, and during the summer months the agricultural students are on project.

I've heard that word project, but I must confess I don't know what it means.

The project is the backbone of our work. If we fail in it, we can't remain at the School. The project is a definite piece of work which should give the student an opportunity to get further practical experience in that particular branch of agriculture which he has studied in school during the winter months. There are many kinds of projects, ranging from small ownership projects to large enterprises in vegetable gardening, poultry, fruit, livestock, ornamental gardening and floriculture.

That sounds like real work.

Well, if you like agriculture, it will not be hard, and the School is looking only for those who are really interested and who will profit by going there.

Do you know, Ted, what you have said has interested me greatly. It may be just the School for me. I'm going to talk it all over with my folks at home, and you may see me up there next year.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 10

HATHORNE, MASS., JULY, 1929

NO. 7

ONE COW EQUAL TO TWENTY-FIVE

ANNUAL REPORT OF THE ESSEX COUNTY DAIRY HERD IMPROVE- MENT ASSOCIATION, ENDING FEBRUARY 28, 1929.

There was a total of 23 herds in the Association, but due to T. B. testing and other changes, only 16 herd records were summarized. The following were members:

Gilbert Tucker, West Newbury; Chester Abbott, Andover; Harvey Turner, Andover; W. D. Bragdon, Methuen; Essex County Training School, Lawrence; Hardcourt, Inc., North Andover; Mrs. W. A. Wood, Hathorne; I. H. Sawyer, Topsfield; Fred Miller, Methuen; Herbert Carter, Andover; J. T. Chadwick, West Boxford; Robert Sawyer, Bradford; Maynard Lane, Ipswich; M. A. Askman, Beverly; James J. Clark, North Andover; and Dr. J. H. Kittredge, North Andover.

Details on each herd have been mailed to members of the association. In order to compare each herd and each cow on a fair basis, all production was converted to four per cent fat basis by multiplying the milk production by .4 and adding to this the fat in pounds multiplied by 15.

AVERAGES

The average four per cent milk production was 7,241 pounds; 283 pounds average fat; on basis of \$4.02 per hundredweight for milk the average value of product was \$291.09 per cow and the total feed cost was \$141, thus leaving \$150 as profit over feed cost. The average feed cost per hundredweight of milk was \$1.95.

COMPARISONS

Evidently "production per cow" was the big factor, as shown by the table below:

Group	Production of 4% milk	Total feed cost per cwt. milk
1	6000—7000 lbs.	\$2.19
2	7001—8000 lbs.	1.78
3	8001—9000 lbs.	1.85
4	Over 900 lbs. (only one herd)	1.61

The production and its relation to profit over feed cost and net profit per cow are indicated in Table II.



GILBERT TUCKER

TABLE I

Production per cow	Profit over all costs per cow	Profit over feed costs per cow
6000—7000 lbs.	\$4.20	\$115.00
7001—8000 lbs.	54.00	156.00
8001—9000 lbs.	62.00	190.00
Over 9000 lbs.	102.00	235.00

Dr. Warren, Van Slyke, and other experts state that costs of milk production average:

Feed and roughage	54%
Labor and hauling	34%
Use of buildings and equipment	4%
Interest and depreciation	5%
All other costs	3%
Total	100%

On the basis of net profit over all costs, 25 cows producing 7000 lbs. or less are required to equal the net profit from one 9000 lb. cow. Let us compare two such cows.

TABLE II

	Production 6000 to 7000 lbs.	Production 7000 lbs. and over
Value of product per cow	\$233.80	\$392.35
Cost of roughage	79.40	84.00
Cost of grain	59.00	73.00
Total feed cost	138.40	157.00
Total all costs	256.00	290.00
Net profit over all costs	loss 2.20	profit 102.35

In other words, only \$19 more spent for feed gave over 2,000 lbs. extra milk and turned profit out of loss, or \$34 more total costs returned \$104.55.

GILBERT TUCKER'S HERD WINS

Gilbert Tucker's herd of Holsteins in West Newbury won first place in production, according to the annual report of the Essex County Dairy Herd Improvement Association, which was just released by County Agent Smith of the Extension Service.

Mr. Tucker's herd averaged 9,760 pounds of four per cent milk, or fifteen quarts daily. Each cow returned a net profit above all expenses of \$102. His herd gave an average of 369 pounds of butterfat, and he thus will receive a special "Master Dairyman" certificate from the National Dairy Council.

Other herds on the Honor Roll with fat over 300 pounds are: Chester Abbott, Andover; Harvey Turner, Andover; W. D. Bragdon, Methuen; Essex County Training School, Lawrence; Hardcourt, Inc., North Andover; Mrs. W. A. Wood, Hathorne; I. H. Sawyer, Topsfield.

These records are cost accounts kept on 312 cows in 16 herds in Essex County. These records show that the net profit over all expenses on a cow producing less than 7,000 pounds of milk a year was \$4.20, but from cows producing 9,000 pounds of milk the profit was \$102. One 9,000 pound cow was as profitable as 25 of the 7,000 pound cows.

Note—Mr. Tucker is a graduate of the Essex County Agricultural School, Class of 1919, and of Connecticut Agricultural College, Class of 1923. He is owner-operator of the Ordway Farm in West Newbury, specializing in dairying and fruit.

DOES IT PAY?

Brighton reports show that ordinary milk cows can be purchased for \$150 to \$200. Suppose one pays \$260, however, for a 1,500-weight cow with large barrel, hips, chest, udder, but with small ankles, neck and head. Such a cow would likely give 1,500 to 2,000 pounds more milk in one year than the other, but cost \$80 more. The increased cost of the cow is offset by increased profit the first year (see above). After that, as long as she is kept there will be \$100 a year additional net profit for the better grade cow.

—F. C. Smith, County Agent.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

- August 7—Market Gardeners' Field Day, Waltham.
August 9—Mass. Fruit Growers' Association Meeting at Marlboro.
September 3—Opening day of School for new students, both departments.
September 4—Opening day for advanced students in the Home-making Department.
September 11-14—Topsfield Fair.
September 30—Opening day for advanced students in the Agricultural Department.

ALUMNI NOTES

An effort has been made to keep the graduates of this School informed as to the present addresses and activities of their former classmates. To carry this idea further, the Director's Office has prepared a complete Alumni Directory, by classes, and in the near future every graduate will receive a mimeographed copy of his class directory. We feel that this information will be appreciated and will help to further class friendships.

AGRICULTURAL DEPARTMENT

ABBOTT, WILLIAM J., '16, dairy herd improvement work; lives at 44 North Main St., Lancaster, N. H.; married and has two children.

ARMITAGE S. PHILIP, '27, landscape gardening work on private estate; address, 8 Tudor St., Lynn.

BERGSTROM, EDWIN E., '19, 4-H Club work; address, 6 Porter St., Rutland, Vt.; married and has one child.

BERGSTROM, ERIC H., '23, electrical work; address, 150 Jenness St., Lynn.

CASSANO, JOSEPH, '20, teacher, Wakefield High; address, 51 Elm St., Wakefield; married.

CHAPMAN, CHARLES B., '16, operator-manager Tide Water Oil Company; address, 7 West St., Marblehead; married and has one child.

CHESLEY, WILLIAM L., '18, variety store, sign printing; address, 140 Lake St., Lancaster, N. H.; married.

DEQUOY, STANLEY W., '17, 4-H Club work; address, Woodsville, New Hampshire; married.

EARLEY, WILLARD A., '24, electrical work; address, 10 Symonds St., Salem.

EASTWOOD, JOHN E., '17, instructor of dairying at Essex Aggie; lives at 11 Bates St., Danvers; married and has one daughter.

FROST, ROY B., '27, general farm work; address 1064 Great Pond Road, North Andover.

GOULD, THOMAS T., '28, fruit and poultry farm; address, c/o Donald B. MacCollom, Sterling Junction.

GREY, MELVILLE G., '17, milk, general farming and roadside stand business; married; member of the Board of Trustees of this School.

HALL, EVERETT L., '17, general contracting work and farming; address, R. F. D. No. 2, Wells, Maine.

HANNERS, RALPH L., '21, forestry work; address, 61 Odell Ave., Beverly; married.

HARRIS, FRED D., '16, manager hardware store and operator filling station; lives at 59 Washington St., Ipswich; married and has two children.

HEADLEY, C. MAURICE, '24, general farming; lives at 37 Ashland St., Newburyport.

HENDERSON, A. PORTER, '28, gardener at North Reading State Sanatorium, North Wilmington.

HOWARD, ERNEST A., '18, agricultural supervisor in Haverhill School; address, Whittier School Building, Haverhill.

HOWE, ERNEST A., '24, retailing and wholesaling home-made candy and salted nuts; lives at 364 Main St., Medford.

ILSLEY, PAUL N., '28, poultry, nursery and carpentry work; address, 29 Pond St., Georgetown.

PASUKONIS, PETER M., '28, General Electric Company; address, 98 Bradford St., Pittsfield.

RAY, RUSSELL, '27, clearing land in Wading River, Long Island, N. Y.

ROBERTS, MAXWELL S., '23, foreman wholesale florists; address, Bridgewater Inn, Bridgewater.

STOWELL, WILLIAM E., '25, clerk in J. B. Blood's; address, 604 Western Ave., Lynn.

TROMBLA, J. EDWARD, '18, office manager; address, 115 Ashland St., Melrose Highlands; married and has two children.

VRATTOS, GEORGE C., '21, running chain of confectionery stores; address, 280 Fairmount Ave., Jersey City, New Jersey, and is married.

WOOD, RUTH M. (Mrs. Sarkis P. Kafafian), '20, teaching at Brewster.

FRESHMAN PROJECT NOTES

Richard Helder is doing a very good job at producing vegetables for the North Andover Infirmary. He also cares for two hundred chickens and does general farm work.

The Bulgari brothers, George and James, took a major part in the harvesting of 4,000 quarts of strawberries on their father's farm in Byfield.

Roland Wagner of Ayers Village has diversified project work. The main vegetable crops on the place are cucumbers, cabbage and potatoes. For poultry there are ducks, geese and a turkey. Roland is helping his father do some fine cement work in converting part of a garage into modern quarters for dairy cows.

Walter Lewis of Andover is interested in a pet stock industry side line. He has now quite a collection of rabbits and goats.

Milton Hanson of Lynn has the distinction of operating the smallest garden and of writing excellent weekly project reports.

Milton Huson of Methuen is operating a very good garden on the shore of Big Island Pond, Derry, N. H. The soil is sandy and turtles from the pond have discovered that his garden makes a fine place to "dig in" and lay their eggs.

Stephen Hanson of Rowley is working for Senior Robert Molton of Lynnfield. He took entire charge of the farm for five days when Robert was away on vacation. Hanson's major responsibility was the care of 1,500 chickens.

—E. E. Metcalf.

Instructors O. E. Carlson and J. S. Bennett are attending the Summer Session at the Massachusetts Agricultural College. Philip Cough, Director of Physical Education, is attending the Summer Session at the University of Wisconsin.

Director Smith and his staff attended the annual conference of agricultural teachers and directors at the Norfolk County Agricultural School in Walpole, July 30 to Aug. 2.

SCHOLARSHIP FOR WINNER IN BALL BROS. CANNING CONTEST

The Ball Bros. Co. of Muncie, Ind., announce a scholarship of \$50.00 to the winner in a Ball jar canning contest for 4-H Club members in this State. Further particulars of this contest may be had from Horace J. Shute, Club Agent for Essex County, who has charge of the work in Essex County.

Palmer Perley, '27, of Rowley, is studying landscape architecture at Harvard University Summer School.

CABBAGE WORMS AND APHIDS SUCCUMB TO AR- SENIC-NICOTINE DUST, SAYS SPECIALIST

"Arsenic and nicotine in combination with lime have been found to be the most effective materials to use in combating cabbage worms and aphids in tests of various methods of treatment made on the grounds of the State Experiment Station, Geneva, N. Y.," says P. J. Parrott, Station entomologist. Cabbage worms are more or less abundant at this time of year, and may prove quite destructive if not combated with a poison dust or spray, says a specialist.

Aphids have already made their appearance in considerable numbers in some sections of the State, and the addition of a little nicotine to the poison dust used for cabbage worms will check aphids quite effectively, it is said.

THE DUST MIXTURE

The most effective dust mixture tested in the Station plantings contains 15 parts of powdered lead arsenate to 100 parts of hydrated lime, says Mr. Parrott. This is dusted directly on the plants, and, according to this authority, does not in any way impair their use for human food. Repeated applications of the dust during the season are necessary for really effective control, especially when the heads are forming, as new growth is continually being exposed to the ravages of cabbage worms.

If aphids are present in any considerable number, it is suggested that 1 per cent nicotine be added to the poison dust. This will increase the cost of the mixture slightly, but it will rid the plants of the lice at the same time that the dust is giving protection against the worms.

VACCINATING GROWING STOCK

CHICKEN POX MAY BE CON- TROLLED

A new type of vaccine is now available which gives complete immunity or protection against chicken pox.

It is a very easy and simple operation to perform. It is not expensive, costing about two cents per bird.

The operation consists of pulling out six or eight feathers from the bird's thigh just above the hock, and applying vaccine to this spot with a small camel's hair brush.

This vaccine may be obtained now from two reliable sources. First, of the Jensen-Salsbery Laboratory, Kansas City, Missouri. This concern will not sell to you or any other poultryman. Purchase must be made through a registered veterinarian. Your local

veterinary will be glad to do this for you at a nominal charge.

Second, from the Veterinary Department of the University of New Hampshire. In both cases the cost is about two cents per dose. The vaccine comes in small bottles, 100 doses per bottle. It ought to be used in a month's time and kept in the refrigerator until used.

We recommend that all stock on your growing range be vaccinated, and that it be done if possible when chicks are from three to four months of age. Birds show small scabs and a swelling at point of application and a listless attitude after six or eight days for about one week, and are then immune for at least one year. All respiration troubles, such as colds, canker, roup, etc., are less likely to occur in vaccinated flocks.

GASOLINE TAX REFUND

All requests by farmers for refund of tax on gasoline used in tractors, etc., should be made to Henry F. Long, Commissioner of Corporations and Taxation, State House, Boston.

FAIR DATES

Toppsfield, September 11-14.

Eastern States, September 15-21.

Worcester, September 24-28.

Brockton, October 1-5.

RECENT BULLETINS

"Making Bordeaux Mixture," by W. L. Doran and E. E. Guba, Extension Leaflet No. 33, Massachusetts Agricultural College, Amherst, Mass.

Extension Leaflet No. 116, entitled "Vegetable Spraying and Dusting," will answer most of the questions regarding injurious insects and diseases of vegetable crops. If you desire a copy write to the Extension Service, M. A. C., Amherst, Mass.

"Potato Insects and Diseases," Extension Leaflet No. 21, by Professor H. T. Fernald and Professor A. V. Olson of Massachusetts Agricultural College.

"Know Your Mosquito," is the title to a leaflet just issued by the Division of Reclamation, State Department of Agriculture, as an assistance in putting across the general campaign of mosquito control which is now being carried on in the state under the joint auspices of the State Department of Agriculture and of Public Health. The leaflet, prepared by L. B. Boston, Director of the Division of Reclamation, deals briefly and in popular terms with the life history of the mosquitoes which pester and bite through the warm weather.

Copies of the 1928 Crop and Livestock Review for Massachusetts may be obtained from the Division of Markets, 136 State House, Boston, Mass.

SUMMARY OF WEATHER OBSERVATIONS

APRIL-MAY-JUNE, 1929

	April	May	June
Max. Temp. and date	83 (7th)	94 (30th)	92 (18th)
Min. Temp. and date	24 (11th)	32 (10th)	36 (3rd)
Mean Daily Temp.	43.9	56.9	65.1
Boston normal Temp.	46.4	57.1	66.4
Greatest daily range in Temp.	46 (7th)	33 (11th, 18th)	38 (30th)
Least daily range in Temp.	3 (6th, 16th)	3 (21st)	8 (20th)
Precipitation	7.59" (6" S)	3.32"	1.58"
Boston normal precipitation	3.20"	3.23"	2.70"
Excess for month	4.39"	.29"	—1.12"
Total for year to July 1	....	....	22.93"
Excess to July 1	....	....	3.22"
Mean rel. humidity 8 a. m.	74.1%	71.2%	70.4%
No. days rain fell	18	11	10
No. clear days	9	16	12
No. partly cloudy days	7	10	15
No. cloudy days	14	5	3
Total hours sunshine	156	283½	285½
Per cent sunshine	38.9%	62.6%	62.5%

The three-month period was notable for its variation in rainfall. April was the heaviest month recorded in five years of observations here at the School, while June was well towards the other extreme. The light rain of June was fairly well distributed, however, so that drought conditions are not severe at present.

Temperature conditions have been not far from normal throughout the year, although April averaged somewhat below normal for that month.

May and June were in sharp contrast with April in point of hours of sunshine: in June there was no day without some sun.

—H. A. Mostrom.

DELEGATE TO NATIONAL 4-H CLUB CAMP WRITES OF HIS TRIP

At the third National 4-H Club Camp in Washington, D. C., there were delegates from thirty-nine states and Hawaii. The Hawaiian members traveled six thousand miles to reach the camp and left Hawaii June first.

The members of the camp slept in army tents on the grounds of the Department of Agriculture, just across from the Washington Monument. In many of the tents there were members from at least two different states. The Massachusetts boys were in the same tent with the Hawaiians and the Bay State girls with the girls from Texas.

After breakfast, every morning, there was an assembly in the Auditorium of the National Museum. We heard C. W. Warburton and C. B. Smith, both of the Extension Department, John Alexander of the American Youth Foundation, Hon. Ruth Bryan Owen, Congresswoman from Florida, and Mr. Dunlap, Assistant Secretary of Agriculture.

After the speaking, the members went to their different groups and discussed the topic of the morning. These topics usually dealt with club work, and since there were delegates from ten different states in each group, we learned various ways of club leadership and of the programs of the clubs. There were several things which interested me. One was planning the program for your club meetings for at least a year ahead. Another was having a community committee which arranged the schedule for the church, club, scout, school and grange activities; this committee was composed of representatives of the different organizations. Another idea which I thought good, was to have all the club members form a community club with meetings once a month to take care of the social side of club work. The leaders should meet often, so that they could cooperate. Of course, the different clubs would meet separately for their own work.

During the week, between the conferences and dinner and in the afternoons, the campers went on a great many sight-seeing tours. There was a trip to Mount St. Alban's Cathedral, the head of the Episcopal Church of America, where President Wilson and Admiral Dewey are buried; to the Bureau of Printing and Engraving, where the money and stamps are made; to the Aircraft Building, where there are all types of ancient and modern airplanes; to the Arts and Industries Building, where there are old types of vehicles, in-

cluding ox-carts and the first automobile; to the Library of Congress, which is the largest library in the world and which covers thirteen and six-tenths acres; to Mount Vernon, where a club boy and girl placed a wreath on the tomb of George Washington; to the Arlington Cemetery, where Austin George of Massachusetts and a girl from Texas placed a wreath on the tomb of the unknown soldier; to the Capitol, the Lincoln Memorial, the Corcoran Gallery of Art, the Pan-American Building, and other places of interest in Washington. Besides visiting all these buildings and historic places, there were tours to the Government Experimental Farms at Arlington, Va., and Beltsville, Md. The Arlington Experiment Farm deals with horticultural experiments, while the Beltsville Experiment Farm confines its experimental work to animals. The Arlington Farm carries out variety tests on vegetables, flowers and grains. On this farm there are also plots of lawn grass to determine which kind of lawn grass will withstand disease and look the best. On this farm there are also interesting road experiments.

The Beltsville Experiment Farm experiments on animals, especially their breeding, and tries to discover new principles of improving farm animals and to test old beliefs. The farm uses guinea-pigs, because of their frequent litters, and tests their conclusions later on the larger animals. This farm also carries on investigations on the effect of feeding in producing quality foods. There are also investigations on horses, beef and dairy cattle, goats and sheep, hogs and poultry, in an effort to determine how to control diseases and the effects of in-breeding.

While in Washington, we had our pictures taken with President Hoover, on the White House lawn. Tuesday morning we went to the White House as guests of Mrs. Hoover. We were received in the East Room by Mrs. Hoover, and after shaking hands with her we went to the dining room where we were served lemonade and cookies.

Saturday night we were the guests of the National Press Club and after the banquet the radio program was broadcasted, which included a talk by Mrs. Herbert Hoover.

Friday morning Mrs. Hoover came to Camp and presented the Secretary Hyde's cups to Helen Drinker of Virginia and to John Jackson of Louisiana. In the afternoon we were the guests of the Washington Baseball Club and before the game started a girl from Kansas and a boy from Indiana made Walter Johnson an honorary 4-H Club member. Evidently this helped, for the Washington

HONOR ROLL, THIRD TERM

AGRICULTURAL DEPARTMENT

The following students' names appeared on the Honor Roll for the third term. The names which are starred twice have been on the Honor Roll twice before, while those with one star have been on once before during this school year. To be on the Honor Roll a student must obtain at least 18 credits out of a possible 21 each term.

Seniors	
*Arthur Gordon	Rowley
Llewellyn Jones	Haverhill
Courtland Laughon	Haverhill
**Robert Moulton	Lynnfield
*Henry Roberts	Manchester
*Elno Sornunen	Peabody
*Raymond Turner	Haverhill
Juniors	
**Ernest Blaney	Cliftondale
**Clifford Bryer	Cliftondale
*Roland Daggett	Rockport
Franklin Ellis	Methuen
Ovide Gauvin	Haverhill
Lester Knowlton	Hathorne
Thomas Marsden	Cliftondale
**Roger Peabody	Georgetown
**Ida May Perkins	Haverhill
Richard Saunders	Gloucester
Alexander Swinarski	West Peabody
Sophomores	
Donald Driscoll	Peabody
IIC—IID	
Lester Cole	Newburyport
**Otis Curtis	Gloucester
*Henry Cryan	Swampscott
Everett Fisher	Saugus
Robert Leith	Haverhill
Alfred Medford	Medford
*Lawrence Westcott	Melrose
*Richard Woodbury	Fitchburg
Freshmen	
**Sidney Batchelder	Andover
*Francis Biery	Methuen
*George Bulgaris	Rowley
*William Chase	Rowley
Richard Heider	North Andover
*Richard Nasel	Lawrence
George Smith	Hamilton
*Kenneth Sprague	North Andover
Roland Wagner	Haverhill

QUESTIONS AND ANSWERS

Question: Is raw beet good in salad

Answer: Raw beet is delicious in any salad where cooked beet may be used. Put it through the food grinder with a small knife. Unless it is served soon after it is ground, a little lemon juice added keeps it from turning dark. A very good combination is 1 cup of shredded pineapple, 3 cups of shredded cabbage, and 1 cup of ground raw beet. Moisten the pineapple and cabbage with your favorite dressing, and garnish with the ground beet. This is not only very pretty to look at, but also very good to eat.

team beat the Boston Red Sox five to four.

Wednesday morning we left for home, with a better idea of our government and of the responsibility of each citizen.

(Signed) SILAS LITTLE, JR.,
Newbury.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 10

HATHORNE, MASS., AUGUST, 1929

NO. 8

OPPORTUNITIES FOR BOYS AND GIRLS TO EXHIBIT AND JUDGE AT THE TOPSFIELD FAIR, SEPT. 11-14

An opportunity for any boy or girl under 21 years of age, to exhibit his or her products is now offered by the Topsfield Fair authorities. Entry blanks and complete premium lists may be obtained from R. H. Gaskill, Topsfield, Mass.

RULES

1. The following classes are open to all boys and girls under 21 years of age, whether members of any organization or not.

2. All exhibits must represent work of individual who enters same.

3. Only worthy exhibits will receive prizes at discretion of judges.

4. Entries in all exhibit classes should be sent in to R. H. Gaskill, Topsfield, before September 7th, except poultry, which must be in by September 3rd.

5. Entries in judging contests must be submitted to persons in charge of contests by 10 A. M. on the day of the contests.

6. Exhibits must be on Fair grounds by 10 A. M. Wednesday, Sept. 11.

7. First prize money will be paid only when class has three or more entries. If less than three entries, 1st ribbon and 2nd money will be given as 1st prize, 2nd ribbon as 2nd prize.

8. Ribbon prizes will be given in all awards in addition to cash prizes as listed.

Section 1 VEGETABLE EXHIBITS

Class	Best Exhibit	1st 2nd	2nd ribbon
1	25 pods String Beans	.75 .50	ribbon
2	25 pods Shell Beans	.75 .50	ribbon
3	1 pint Dried Beans	.75 .50	ribbon
4	Beets, five	.75 .50	ribbon
5	Cabbage, one	.75 .50	ribbon
6	Carrots, five	.75 .50	ribbon
7	Sweet Corn, 3 ears	.75 .50	ribbon
8	Cucumbers, three	.75 .50	ribbon
9	Peppers, five	.75 .50	ribbon
10	Tomatoes, five	.75 .50	ribbon
11	Squash (Winter), one	.75 .50	ribbon
12	Tomatoes, five	.75 .50	ribbon
13	Turnips, five	.75 .50	ribbon

Exhibits in each class must be uniform in variety.

Section 2 POULTRY EXHIBITS

Class	1st 2nd	2nd 3rd
1	Best Hen	2.00 1.00 ribbon
2	Best Cockerel and 4 pullets	1.00 ribbon ribbon
3	Best Pullet	1.00 ribbon ribbon
4	Best Cockerel	1.00 ribbon ribbon

(Continued on page 2)



4-H CHAMPIONS AND THEIR LEADERS, WITH CLUB AGENT SHUTE, AT CAMP GILBERT, JULY, 1929

Top Row, left to right—Miss Myra Smith, Florence Fielder, Mrs. E. L. Jordan. Second Row—Helen Spaney, Howard Johnson, Oseoe Gilman, Charlotte Semple, Viola Messer. First Row—Mrs. Silas Little, Justin Little, Horace Shute, Elizabeth Knight, and Mrs. L. E. Jordan.

4-H CLUB CHAMPIONS ENJOY WEEK AT M. A. C.

As in previous years, all county and state champions were given a trip to Camp Gilbert at Massachusetts Agricultural College, with all expenses paid. This trip is, in part, a reward for great achievement in 4-H Club work. Camp Gilbert is named in honor of A. W. Gilbert, Commissioner of Agriculture for Massachusetts.

This year about 125 boys and girls, representing every county in the state, were in attendance.

Essex County sent eight champions to camp, all of whom were outstanding in their particular line of club work. Those who received certificates as champions were: Viola Messer of Methuen, Canning Champion; Oseoe Gilman of Newbury, Forestry Champion; Elizabeth Knight of Newbury Dairy Champion; Howard Johnson of Methuen, Poultry Champion; Helen Spaney of Newburyport, Room Beautiful Champion; Justin Little of Newbury, Garden Champion; Florence Fielder of Beverly, Clothing Champion; and Charlotte Semple of Gloucester, Food Champion.

These young people had the pleasure of meeting the other 4-H champions of the state and enjoyed a well-prepared program.

In connection with the camp there

was a local leaders' training school, which four leaders from Essex County attended. These leaders are Miss Myra Smith of Methuen, Mrs. Silas Little of Newbury, Mrs. E. L. Jordan of West Newbury, and Mrs. Leon Jordan of Groveland.

During the week these leaders received many valuable ideas, both in club work and in leadership.

Several contests were held in which the campers participated. These included a health poster contest, school dress contest, party dress contest, dairy judging contest, and music memory contest. As usual, the delegates from Essex County won many honors.

The health poster contest was won by Bertha Black of Methuen. Second prize on the school dress contest went to Charlotte Semple of Gloucester, and the second prize on the party dress contest was awarded to Florence Fielder of Beverly. The silver loving cup for the dairy judging contest, also came to Essex County. This team consisted of three members: Oseoe Gilman, Elizabeth Knight and Justin Little. Elizabeth Knight had the second highest individual score in the contest. In the music memory contest, Essex County had three winners out of the ten highest.

—Horace J. Shute, Club Agent.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

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School, Hathorne, Mass.

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CALENDAR

September 3—Opening day of School
for new students of both depart-
ments.

September 4—Opening day for ad-
vanced students in the Home-
making Department.

September 11-14—Topsfield Fair.

September 30—Opening day for ad-
vanced students in the Agricul-
tural Department.

ORGANIZING VOCATIONAL AGRICULTURAL STUDENTS INTO FUTURE FARMERS OF AMERICA

The movement to organize students
of vocational agriculture into Future
Farmers of America has spread into
Massachusetts. At the recent Con-
ference of Agricultural Teachers of
this state, held at the Norfolk County
Agricultural School in Walpole, a
committee was appointed to consider
the advisability of forming such as-
sociations in this state. The National
Organization of Future Farmers of
America was formed at Kansas City,
Missouri, last fall, with delegates rep-
resenting nineteen state organiza-
tions.

AIMS OF THE ORGANIZATION

The aims of this national organiza-
tion as set forth in the constitution
are: To create more interest in the
intelligent choice of farming occupa-
tions; to nurture a love for country
life; to promote thrift; to encourage
recreational and educational activi-
ties; to encourage cooperative effort;
to strengthen the confidence of the
farm boy in himself and his work;
to develop rural leadership; to ren-
der unselfish service to rural com-
munities; to study farm problems;
and to improve farm practices
through the application of scientific
methods.

ESSEX POULTRYMEN LEADERS

In the State Egg Production Con-
test three Essex County producers
are well up toward the top. In the
large flock class, Homer Rowell of
Groveland ranks fourth. In the me-
dium sized flock class, A. S. Pendle-
ton of Ballardvale is third, and in the
small flock class Robert Parkhurst
of Boxford is seventh.

The mortality is lower than the
average, 13%, as compared with
13.8% for the state. The average
price for eggs here was 50.7 cents, as
against 47.6 cents for the state.

The highest percentage of produc-
tion in Essex County was earned by
Arthur Basiliere of Merrimac, with
record of 59 per cent and 142 eggs
per pullet. He is fifth in the north-
east region of the state with a very
small flock.

NEW BULLETINS

Massachusetts Agricultural College
Bulletins, Amherst, Mass.

Control Series No. 48—Eradication
of Pullorum Disease in Massachu-
setts.

Bulletin No. 251—Causes of Differ-
ences in Poultry Profits.

Bulletin No. 250—The Consumer
Demand for Apples.

Bulletin No. 247—Biennial Report
of Massachusetts Agricultural Col-
lege.

(Continued from page 1)

Section 3 CANNING EXHIBITS

Class	1st	2nd	3rd
1 Best individual col- lection of 5 jars, all different products	2.00	1.50	1.00

Vegetables

Class	Best Jar	1st	2nd	3rd
2 String Beans	.50	.25	ribbon	
3 Shell Beans	.50	.25	ribbon	
4 Beets	.50	.25	ribbon	
5 Corn	.50	.25	ribbon	
6 Greens (any kind)	.50	.25	ribbon	
7 Peas	.50	.25	ribbon	
8 Tomatoes	.50	.25	ribbon	
9 Relish	.50	.25	ribbon	

Fruits

Class	Best Jar	1st	2nd	3rd
10 Blueberries	.50	.25	ribbon	
11 Cherries	.50	.25	ribbon	
12 Peaches	.50	.25	ribbon	
13 Pears	.50	.25	ribbon	
14 Plums	.50	.25	ribbon	
15 Raspberries	.50	.25	ribbon	
16 Rhubarb	.50	.25	ribbon	
17 Strawberries	.50	.25	ribbon	
18 2 jars Jellies, any combination	.50	.25	ribbon	

Section 4 JUNIOR NEEDLEWORK

Class	1st	2nd	3rd
1 Best Wash Dress made by girl under 15	1.00	.50	ribbon
2 Best Child's Dress and Bloomers	1.00	.50	ribbon
3 Best Table Runner	.50	.25	ribbon
4 Best pair Pillow Slips	.50	.25	ribbon
5 Best Towel	.50	.25	ribbon
6 Any other exhibit worthy of prize			

JUDGING CONTESTS

In Livestock, Poultry, Fruit, Vege-
tables, Canning and Clothing will be held
Saturday, September 14, at 10 A. M.
These contest are open to all under 21
years.

MASSACHUSETTS AGRICULTURAL FAIRS ASSOCIATION

PRIZE ESSAY CONTEST 1929

The Massachusetts Agricultural
Fairs Association, desiring to extend
its educational program among the
young people of the State, has inaugu-
rated an essay contest for the pur-
pose of interesting young people who
attend high and vocational schools, in
the educational advantages of agricul-
tural, industrial, educational and
recreational possibilities of the Com-
monwealth. We believe that these
purposes coincide with the objects of
the public school system, and the
Association feels that these two agen-
cies can co-ordinate their interests
and that the essay contest offers an
effective method of securing a wider
appeal to this program. Fifty dollars
in prizes is offered, to be divided as
follows: First prize, \$20.00; second
prize, \$15.00; third prize, \$10.00;
fourth prize, \$5.00, for the best 1,000
to 1,500 word essay on "What I
Learned at an Agricultural Fair."

RULES AND REGULATIONS

1. This contest is open to all stu-
dents regularly matriculated in a
senior high school or vocational
school of high school grade in a two
to four year course.
2. All essays must be typewritten
on white paper, standard size sheet—
8½ x 11 inches.
3. Typewriting may or may not be
done by contestant.
4. Sheets shall be written on one
side only.
5. Essay must be based on obser-
vations at an agricultural fair in
1929.
6. Essays must be original and
the contestant's own work.
7. The name and address of the
contestant must appear in the upper
right-hand corner of title sheet and
the name of the school in the upper
left-hand corner of same.
8. The principal of the school is
requested to make a signed statement
on the last page of each essay, that
to the best of his knowledge and be-
lief, the work is the contestant's own
composition.
9. All essays must be forwarded
to the Secretary of the Association
not later than November 1, 1929.

For further information, address
all inquiries to A. W. Lombard, Sec-
retary, 136 State House, Boston,
Massachusetts.

The premium lists in poultry are
now ready for distribution. Inter-
ested poultrymen may obtain a copy
by addressing the school.

SCHEDULE OF DAIRY- MEN'S TOUR, AUGUST 28.

The dairymen of Essex County are to hold an auto tour August 28. County Agent Smith and Sumner Parker, State Leader of County Agents, have outlined a trip that is interesting and worth while.

SCHEDULE

10.30 a. m. Meredith Farm, Cross Street, Topsfield. Here are two excellent fields of alfalfa, one pasture improvement field, and an excellent herd of purebred Guernseys. Edward Wigglesworth, the proprietor, will be pleased to explain these projects.

12.00 Alfalfa experimental plot, Cooperative Farming Association office, Topsfield. A comparison of June, July and August seeding.

12.15 p. m. Basket lunch, Fair grounds.

1.15 p. m. Leave Fair grounds.

2.00 p. m. Robert Sawyer, Salem Street, Bradford. Five year old alfalfa. T. B. tested Ayrshires in Cow Testing Association.

3.00 p. m. Andrew Longfellow, Seven Star Road, Groveland. Alfalfa cut last September versus uncut.

3.45 p. m. Gilbert Tucker, West Newbury. A purebred Holstein herd. Highest production in the County Cow Testing Association in 1928. An accredited herd.

The 4-H Club Agent, Horace Shute, plans to bring the members of the Calf and Dairy Clubs, Charles Moxley, North Andover, is Chairman of the County Dairy Committee and President of the Essex County Dairy Herd Improvement Association. He says everyone is invited to come and to bring his wife or sweetheart.

PASTURE vs. HARVESTED FEEDS

As a result of a survey in New York State of 1,134 farms comprising 82,000 acres of pasture, it was found that during the pasture season of 161 days, the feed cost per day per cow was .054 cents for pasture and .043 for supplementary grain or a total feed cost per cow per day while on pasture of less than 10 cents. In contrast to this, it was found that, during the winter months when labor had to be charged against the growing of hay and silage, the feed cost per cow per day was 38 cents or a difference of 28 cents per cow per day in favor of pasture feeding. This would amount to \$45.00 per cow that a farmer would save by having pasture for 161 days in place of barn feeding in the summer. On a herd of 10 cows it would amount to \$450 which would go quite a long way toward buying fertilizer to improve pastures.

TOPSFIELD FAIR

TOPS THEM ALL

September 11-14 Inc.

COST OF HAULING MILK

Farmers have frequently spoken of milk prices as "delivered," yet there are so many "ductions" that price varies considerably. The Cornell College of Agriculture found as the result of a survey of 204 dairymen that the average cost per farmer for hauling his own milk was greater than when he paid a commercial truckman to haul it. The figures are given below.

Length of haul	Cost per cwt. for hauling by farmer	Cost per cwt. for hauling commercially	Cost per quart
1 mi. or less	12.6	12.3	.0026
1.1 mi. to 2 mi.	20.0	12.5	.0027
2.1 mi. to 3 mi.	23.8	13.2	.0028
3.1 mi. to 4 mi.	27.1	14.5	.0031
Over 4 mi.	41.1	20.0	.0043

FALL EGG PRODUCTION PAYS

Most poultrymen believe that pushing fall egg production is profitable. Bulletin No. 231 of Massachusetts Agricultural College shows figures from many cost accounts kept in the state indicating that the higher the percentage of total egg production during September to December, the higher the labor return per bird.

Another factor of importance was price. The labor return per bird on the average increased with the price of eggs. But of all factors, production per bird was most important. Other products second.

Copies of this bulletin may be secured from the Extension Agent, Hathorne, Mass.

—F. C. Smith.

POULTRY JUDGING TEAM WINS CUP

The silver cup in the poultry judging contest held at the Massachusetts Agricultural College during Farm and Home Week, was awarded to a team from Essex County made up of John Hall, Jr., of Ballardvale, Homer Rowell of Groveland, and Albert Doolittle of Danvers. W. B. Moore, Poultry Instructor of this School, selected the team.

MILK IN HOME REFRIGER- ATOR KEEPS BEST AT 45° OR LOWER

To keep milk in the best possible condition in the household refrigerator a temperature of 45° F. or below in the milk compartment is desirable. This conclusion is the result of studies recently made by the Bureau of Home Economics of the U. S. Department of Agriculture to determine the temperature and conditions that should be maintained in the home refrigerator to keep milk for the length of time that it is ordinarily held. Refrigeration is used to retard the development of bacteria in milk and prevent the decomposition brought about by these organisms, and so keep the milk as nearly as possible in the original wholesome condition.

These studies show that both raw and pasteurized milk stored for 24, 48, 72, and 96 hours have only a small increase in bacteria when stored at 40° F., whereas at 60° F. the increase is very large. The first great jump in bacterial growth takes place between 43° F. and 50° F. The relation of time to temperature is also important. If milk is held for a short period—24 hours or less—a temperature not exceeding 50° F. appears to give satisfactory results. If milk is held for a longer time, then a temperature not to exceed 45° is of real value.

A temperature of 45° F. or below can be obtained in the milk compartment of a good, well-insulated, well-constructed ice or mechanical refrigerator in a room of ordinary temperature. Another important point is the refrigeration of milk as soon as possible after delivery. Milk that had been kept at 40° F. before delivery, but allowed to stand at room temperature of 75° F. or 1½ hours and was then refrigerated, showed great multiplication of the organisms that cause decomposition and spoilage, often equal to the 24-hour rate of increase at refrigerator temperatures.

Under no circumstances should milk be placed in a refrigerator in an open pitcher, bottle, or other uncovered container. It should be tightly stoppered and not be opened until immediately before use. If only a portion of the bottle of milk is used, the cap should be replaced. Milk should always be kept in the coldest portion of the refrigerator. There may be as much as 10 degrees difference in temperature on the different shelves. Milk may be stale and unfit for food when it is not actually sour, if it has been improperly kept. It should, therefore, be kept near its original wholesome state by the aid of adequate household refrigeration.

VISIT TO AGGIE SCHOOL IS TITLE OF ROTARY ESSAY

COMPOSITION OF WARREN G.
WEBSTER, HIGH SCHOOL STU-
DENT, IS CONTEST WINNER.

The first prize winner among the High School seniors who competed in the recent essay contest conducted by the Salem Rotary club as an aftermath of its boys' week activities, is Warren G. Webster, who received his diploma Wednesday evening and who wrote a splendid paper upon his visit to the Essex Agricultural school in Danvers. The latter school was one of the institutions that many boys looked over recently when the Rotarians took them from school long enough to view various industries in order to enable them to make a selection in their vocation.

Mr. Webster's winning essay follows:

The Essex County Agricultural school is situated in Danvers, Massachusetts. As the name of the school implies, agricultural training, chiefly, is given to boy and girl residents of Essex county, free of charge. The products gardened by the students serve to pay their way through the school, and at the same time, the students are gaining practical experience which will prove a great benefit after graduation.

After graduation from the school, one is fully prepared to start a business of his own, if the opportunities present themselves. Half the school year is devoted to classroom work, and the other half to project work. A "project" is a full summer program of work, either at home or in an employed position. The school offers several distinctive types of courses to its pupils.

Vegetable gardening makes up one of the most important courses chosen by the young men. This course consists of the study of soil, manures, fertilizers, tools, and the culture of various vegetables. Each boy, besides his work in the classroom, has a garden of his own, where he tends his crops with great care. The land utilized by the boys for crops is truly a beautiful sight to see. No mother takes greater care of her child than those students do of their products.

Another course of study is known as the "small animal" course. Small animals include sheep, swine and milch goats. The lads learn everything about these animals, how to feed them, butchering processes, shearing, marking, and judging. The boys, of course, have real animals to tend, and the animals certainly appear to be well cared for. Several of the outside buildings are employed to house the animals.

An especially fine routine is included in the course called poultry husbandry. The course treats all phases of the subject, culling the hens and pullets, killing and dressing poultry, treatment of poultry diseases, feeding and mixing grain, incubating, brooding chickens and egg production. The equipment provided by the school is especially fine in respect to poultry. There are several large hen houses, inhabited by a great brood of hens, which lay a large number of eggs daily. I was given the privilege of taking an egg home with me, which I promptly fried and ate. I have never tasted a better egg, and its fine quality may be attributed to the zealous care that the poultry students accord their hens. The school has two mammoth incubators which have a joint capacity of several thousand.

Ornamental gardening and floriculture, as taught at the school, offers a fine training to boys aspiring to be florists. Several local florists received their training at the Essex Agricultural school. The most beautiful building of all at the school, I think, is the hothouse, which contains flowers and plants tended and grown exclusively by the floricultural students in the school. One plant in particular interested me greatly, the thorny cactus, which is common in the great deserts of our country. I had never before seen a real plant of this type, except in pictures. Large, beautiful, multi-colored flowers adorned the hothouse and I could not suppress a feeling of envy of the boys who were able to say, "I had a hand in that!" This floricultural course also gives a thorough knowledge of laying out private grounds, cemeteries and planning gardens.

Strawberries, raspberries, blackberries, currants and gooseberries provide a menu that would make anyone's mouth water. The fruit-growing course of the school includes those products. The temptations assailing the boys choosing this course must be hard to resist. But in all seriousness, the benefits of this course are numerous. The future fruit-grower learns how to choose suitable orchard sites and prune young trees, as well as caring for them in every respect. The lads have their own orchards to care for, and they are as minutely careful of them as they are of themselves.

The last of the boys' courses is by no means of the least importance. It is dairying, and it includes the study of breeds of cattle, feeding, types of dairy buildings, and milk-testing. Cows and their milk are the chief interests of the boys who take this line of work. Each lad has at least one cow under his exclusive guidance. Proper management is accorded the

large group of cows by the boys, and the milk produced is of the best grade. Several boys who specialized in milk-testing the last few years at the school, now have responsible positions in large firms.

To the girls is offered one extensive course in homemaking. The aim of the school in this respect is to accord to girls an education which will enable them to become efficient homemakers. In the morning they prepare the meal, and the other students of the school digest the products of their efforts at lunchtime. I, personally, will vouch for the quality of their cooking. The girls occupy a building of their own south of the main building.

In its own line, the Essex County Agricultural School is unexcelled by any other school in the state of Massachusetts. It gives a thorough vocational training to boys and girls in its respective courses, and finally, prepares them to become useful citizens. I am very grateful to those who have made it possible for me to visit this interesting school, and I am sure that their aim, namely, to broaden Salem boys' education and give them practical information, has been highly successful.

—From the "Salem News."

PROJECT NOTES

Lawrence Westcott of Melrose, is employed at the School as herdsman and has charge of the feeding program and milk records. As a result of his work in livestock judging at the Massachusetts Agricultural College on High School Day, he is a candidate for the team which will be sent from this state to the National Dairy Show to be held at St. Louis, Missouri, in October.

Robert Ellis of Lexington, is employed on the Donnibristle Farm, Topsfield. As a side-line ownership project, Robert is in partnership with Mr. Tronerud, superintendent of the farm, in raising an acre or more of squash.

Nathaniel Hart of Lawrence, is working on the School Poultry Plant with Raymond Arthur, the plant foreman. Mr. Arthur is a graduate of the two-year course, Connecticut Agricultural College, Storrs, Conn. He has had experience on the plant of Roy Jones, poultry specialist, and at the M. A. C. poultry plant.

Hector Gilman, of Salisbury, and Llewellyn Jones of Bradford, are employed at the Robert H. Sawyer Farm, Bradford. Gilman is engaged in general farm work while Jones has charge of the roadside stand.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 10

HATHORNE, MASS., SEPTEMBER, 1929

NO. 9

AT THE FAIR

The School and its staff of instructors was much in evidence at the Topsfield Fair. This year the main School exhibit had a miniature house with attractive lawns and shrubbery. Demonstrations of slipping and potting plants were given by students. The exhibit contained many plant specimens, as well as all the materials used in making good soil for potted plants. It was planned and set up by the ornamental and floricultural divisions, under the direction of Instructors Wright and White.

The apiarian exhibit attracted many with its display of several types of old-fashioned beehives. There were also collections of five different races of bees and exhibits of comb and extracted honey, bees-wax, and honey vinegar. The exhibit was in charge of George A. Meigs, President of the Eastern Massachusetts Beekeepers' Association.

The Essex County Extension Department, co-operating with the Massachusetts Agricultural College, displayed a model layout of a three-man farm, showing buildings and field arrangements.

The vegetable division of this School co-operated with the State Department of Agriculture in an exhibit of fancy vegetables, using the quality products label and having the vegetables wrapped in cellophane.

Instructors W. B. Moore and E. E. Metcalf, as chairmen of the poultry and vegetable committees, were responsible for their respective exhibits.

H. A. Mostrom, J. E. Eastwood and Miss Grace Gilkey were members of the committee in charge of the Children's and Youth's Department.

4-H CLUB EXHIBIT.

The 4-H Club exhibit, in charge of Horace J. Shute, contained about 600 separate entries, which were well displayed. The canning exhibit contained about 900 jars of vegetables, fruits and jellies, and was the work of the 4-H Canning Clubs in all parts of the county. Other creditable exhibits were made by the Clothing, Handicraft, Food and Garden clubs. The 4-H Club lunch counter was well patronized and will undoubtedly be continued by this department.

JUNIOR JUDGING CONTESTS

In the Junior Judging Contests, held on Saturday, September 14, the fol-

(Continued on page 3)



ROADSIDE STAND AT CLOVER HILL FARM, IN BRADFORD, OWNED BY ROBERT H. SAWYER, VISITED BY DAIRYMEN ON TOUR, AUG. 29TH

DAIRY TOUR WELL ATTENDED

The Dairy Tour, held August 28, was quite a success. Thirty cars, about 100 people, made the trip. The first stop, at Meredith Farm, Topsfield, was very interesting. Edward Wigglesworth, the proprietor, had typed the name, age, production record of each cow on a card and tacked it up on the wall behind her. This herd consists of some forty-odd animals, all tested free from bovine tuberculosis and all tested for contagious abortion.

The 4-H Club Judging Team, consisting of Silas Little and Dorothy Colby, both of Newbury, gave a demonstration of how to judge a cow. They have since gone to Amherst, where they won a second prize in competition with six county teams.

Two alfalfa fields were studied. Plenty of lime and fertilizer had been applied and when the fertility of the soil had been built up, desirable results were secured.

A sweet clover permanent pasture with Kentucky blue grass and White Dutch clover as the basis, was observed. Professor Donaldson of Massachusetts Agricultural College explained this method of alternating fields and letting the cows harvest their own hay.

The second stop at the alfalfa test at Topsfield did not show very much as yet, except that the June seeding compared with July and August was by far the best.

After a basket lunch at the Fair Grounds, the County Agent led the string of cars to Bradford, where Robert Sawyer showed his excellent ac-

credited herd of pure-bred Ayrshires, his pasteurizing plant, ice-cream mixing outfit, a five-year-old alfalfa field still yielding well, top-dressed every fall with stable manure, an excellent crop of Green Mountains still green, and then the roadside stand where he sells much of his products. He treated all to ice cream.

We then drove over the winding road, Seven Star Road, to the home of the originator of the famous seed corn, Andrew Longfellow. Here we viewed an excellent field of alfalfa, part cut last September and part left uncut. The portion uncut was heavier and thicker.

The last stop was at Gilbert Tucker's home, West Newbury. Professor Fawcett of Massachusetts Agricultural College, discussed the value of cow test records, and Mr. Tucker explained the production of his herd, over 10,000 pounds of milk, the highest average yield of any herd in the association in 1928. This is an accredited T. B. free herd of pure-bred Holsteins, profitable in the milk pail.

—F. SMITH, County Agent.

FOOTBALL SCHEDULE, 1929

Oct. 4.	Dummer Academy.
Oct. 11.	St. Joseph's Juniorate.
Oct. 19.	Saugus.
Oct. 26.	Needham.
Nov. 2.	Newburyport.
Nov. 9.	Stoneham.
Nov. 16.	Gloucester.
Nov. 23.	Open.
Nov. 28.	(THANKSGIVING DAY) Danvers.

All Games are played away from home.

Essex Farmer and Homemaker

HATHORNE, MASS.

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CALENDAR

Sept. 30.—Opening Day for advanced students in the Agricultural Department.

Nov. 26.—Graduation Day for Class of 1929.

DATA ON NEW STUDENTS

A total of 121 new students have registered in the two departments of the school for the year 1929-1930. Seventy-five are registered in agriculture and forty-six in homemaking.

Lawrence sends the largest number of new students, with a total of nineteen. Danvers is second, with twelve; Saugus third, with a total of ten; Peabody fourth, with nine; Lynn, Newburyport, Rockport and Salem have seven each. All but eight of the thirty-four cities and towns of the county are represented in the entering class.

ALUMNI NOTES

We are glad to learn that the alumni sheets sent out in the early part of August were so well received. Several letters of appreciation were received, as well as requests for copies of other class sheets. These we were glad to supply and still have some available if anyone wishes them.

Two errors have been called to our attention, and we are very glad to print the correct information herewith:

'16—RALPH JENKINS writes that he is teller in the First National Bank in Skowhegan, Maine, and that he has a daughter and not a son, as was incorrectly reported.

'17—WENDELL F. OLIVER is the man connected with the Moon Nurseries in Pennsylvania not William T. as was recorded. Mr. Wendell Oliver is in charge of the Philadelphia Sales Area for the Moon Company.

HOMEMAKING DEPARTMENT

ANDREW, HELEN L., '28, enrolled in the Training School for Nurses at the Salem Hospital.

BATCHELDER, RUTH (Mrs. F. B. Bartlett), '21, at home, 15 Guernsey St., Marblehead.

BOWEN, RUTH (Mrs. A. Gordon Lord), '21, at home, 35 Summer St., Ipswich.

BROWN, ELIZABETH (STENS-RUD), '20, at home, 15 Minerva St., Swampscott.

DOW, MARION H., '25, employed at Gibbs Brothers, florists; address, 605 Chestnut St., Lynn.

DYER, JANET L. (Mrs. Roy C. Durkee), '24, at home, 130½ Holten St., Danvers.

EASTMAN, HAZEL A., '24, attended Framingham Normal, taking the three year course in Vocational Household Arts. She is now teaching in Quincy.

ERICKSON, RUTH C. (Mrs. Palmer Long), '26, at home, 24 Osgood St., Lawrence.

FLYNN, HELEN E., '28 until recently assistant dietitian and housekeeper at the Lawrence General Hospital; address, 95 Mason St., Salem.

GARDNER, LUCIEL (Mrs. Stanley P. Newhall), '24, at home, Gardner Terrace, Gloucester.

GILMAN, CHRISTINE, '25, address, 360 Lovell St., Manchester, N. H.

GLAVIN MARJORIE (Mrs. Kenneth F. Briggs), '21, at home, 48 Pearl St., Amesbury.

GOODWIN, DORIS (Mrs. Clayton M. Porter), '23, at home, 55 Winthrop St., Lynn.

GOULD, RUTH E., '25, address 11 May St., Cambridge.

GRAVES, RUTH I., '28, address 149 Boston St., Salem.

HAWKES, MARJORIE B. (Mrs. Stuart Cogswell), '26, address, Box 95, Assinippi, Mass.

HAZEL, VIRGINIA O. (Mrs. Wilfred P. Carrier), '22, at home, 19 West Baltimore St., Lynn.

HUTCHINSON, ELIZABETH, '27, operating own tearoom at 316 Nahant Rd., Nahant.

ISRAEL, GERTRUDE (Mrs. Paul E. Bouthillier), '21, at home, King's Park, Long Island, New York.

MACCORMACK, GERTRUDE E. (Mrs. S. Irving Moody), '17, at home, 213 Prospect St., Brockton.

MASON, FLORENCE, '25, address 159 Elm St., Marblehead.

PHILBRICK, EVELYN V., '28, student nurse Essex Sanitarium, Middleton.

SYNOPSIS OF PHYSICAL EDUCATION PROGRAM, 1929-1930

Every boy in the school who is not too handicapped, physically, meets with his class for one period; (80) eighty minutes, once a week. The boys are given an opportunity to study the hygiene of their bodies from a series of books according to their ability to understand the technical language involved. These books include Bussey's "Personal Hygiene," Hough and Sedgwick's "Human Mechanism," and Williams' "Healthful Living." This study takes up twenty minutes of the period. The remainder of the time is spent in a series of physical training exercises, which include a few minutes in tactics, five minutes in corrective exercise as designed by Stafford, fifteen minutes in individual stunts and efficiency tests as described in Pearl and Brown's "Healthy Stunts" and Rodgers' "Stunts." The next fifteen minutes are taken up by a series of games as shown and played at the Illinois and Wisconsin Summer Schools, led by Stafford and Mosley. The boys are required to take a shower bath at the end of the period, and needless to say this requirement is enjoyed by all.

During the first month the school arranges to have a physical and medical examination for all the new students. Any remedial defects are noted and correction is requested through personal contact and family notification. Anyone with a serious handicap is allowed to participate in only as much of the program as he is able.

—P. H. COUHG,
Athletic Director.

It is evident that Essex Aggie has some attractions for its graduates. On a recent date the following students and graduates visited the School: E. Batchelder '29, A. Gordon '29, Philip Peabody '22, Roscoe MacKenna '26, Brooks Dwyer '23, Robert Ewing '23, N. Colville '31, J. Sturtevant '29.

REID, RAE, '25, private nursing in Lawrence, address 14 So. Green St., Bradford.

SAWYER, EVELYN (Mrs. Roland Farrin), '24, at home, 12 Williams St., Danvers.

SMITH, GERTRUDE, '25, private nursing in Lawrence, address 21 Lexington Ave., Methuen.

WALKER, RUTH B., '27, dietitian, Central N. E. Sanitarium, Rutland, Mass.

MASSACHUSETTS ESTABLISHES RESEARCH STATION FOR FLORICULTURE

LEGISLATURE GRANTS \$15,000 FOR ADDITIONAL WORK AT WALTHAM

The appropriation of \$15,000, passed by the recent legislature for the purpose of erecting a greenhouse and laboratories for floricultural research, has been definitely authorized. This will erect and maintain an addition to the already established Market Garden Field Station located at Waltham, Mass.

Thus, for the first time, New England horticulture is recognized as an industry worthy of State aid in the study of its many problems of plant disease and insect pests. No location better adapted to this purpose could be found in Massachusetts. It is located within easy reach of nearly two-thirds of the greenhouse industry of the State, and it provides ample land, an already established greenhouse and office with connecting laboratory, and an enthusiastic staff of efficient men now working on fruit and garden problems. This is a most auspicious start that all florists, wherever located may well be thankful for.

"More Profit for the New England Farmer," is the title to an attractive booklet just issued jointly by the Departments of Agriculture of the various New England states. It states the aim of the New England Council, the Departments of Agriculture and other agricultural interests to promote prosperity in New England through the use of a label of identification for high quality New England grown products.

WHY TEN FARMERS FAILED

HENRY A. WARD

*Farm Economics Department,
University of Kentucky.*

After a study and analysis of the business of thirty-one dairy, truck and poultry farmers in Kentucky, I herewith give some of the reasons why ten men of the group failed:

1. Wasted and misdirected capital. Too many hogs and not enough cattle, sheep and poultry.
2. Receipts too small. Should increase receipts from sheep, poultry and dairy cattle and also from cash crops.
3. Wasted available man labor which should take care of additional livestock.

4. Inefficient use of available horse labor, causing high feed cost per crop acre. Should either cut down the number of horses or increase the acres of cultivated crops.

5. Low returns from pasture lands, due either to poor quality of pasture or insufficient livestock. Should improve pasture, so each acre will support more livestock and bring in increased returns.

6. Low returns from dairy cattle, due to low average production per cow. Cows should be tested and the low-producing ones eliminated from the herd. All other known means should be used to increase the average production.

—*American Farming, Sept., 1929.*

STORY OF A BOX OF MCINTOSH APPLES

FROM A STUDY OF MCINTOSH APPLES ON THE BOSTON MARKET BY J. KROEK

A certain bushel box of McIntosh apples sold on the Boston market in November, 1927, for \$1.00.

They were packed "face and fill";	
The average size was 2½ inches;	
They had 65% color;	
75% of the apples were scabby; and	
20% of them showed insect injury.	
If the above apples	
Had been free from insect injury	
and scab;	
Had averaged 3 inches in size instead of 2½ inches;	
Had had 90% color instead of 65%;	
Had been layer packed and wrapped	
They would have sold for.....	\$2.89
	1.00
Difference	\$1.89

One dollar and eighty-nine cents is the bonus for growing and marketing the kind of McIntosh the consumer wants.

Most of the problems of marketing may be solved in the orchard or in the packing-house, because the price-governing factors (condition, size, color, package, etc.) are very largely under the grower's control.

—*Dictated by W. H. Thies.*

Raymond Arthur, foreman of the School Poultry Plant, has been appointed conseller of Camp Bauer for the remainder of the season. Mr. Arthur is a graduate of the two-year course at the Connecticut Agricultural College, and for the last four years has been employed on the Tilson Experimental Farm at the Massachusetts Agricultural College. He has also worked on the poultry plant of Roy E. Jones, at Storrs, Connecticut.

LETTER TO COUNTY AGENTS CONCERNING THE USE OF 14-QUART BASKETS

There has been a great deal of discussion as to the use of the 14-quart peach basket for sale of apples and peaches after November first. This matter has been taken up with Mr. Bevan, who, in turn, has asked the director of standards, Mr. Francis Meredith, to explain the Federal regulations. This he does in a recent letter.

"There should be no difficulty encountered in the use of the 14-quart basket after November first of this year, if the capacity is disregarded and a clear statement of the weight of the contents appears conspicuously."

This will offer a solution I think to your farmers who sell in this popular container. They may easily have on the price card for apples, "At least 18 pounds." This would amply protect the person using the baskets.

—SUMNER R. PARKER,
County Agent Leader.

AT THE FAIR

(Continued from page 1)

lowing Essex Aggie students were awarded prizes:

Vegetable Judging—First Prize, Milton Soper of Lynn, Third Prize—John Borge of Rockport.

Fruit Judging—First Prize, Ernest Blaney of Cliftondale, Third Prize, George Parker of Saugus.

Dairy Judging—Third Prize, George Cross of Danvers.

In addition to the individual prizes, Essex Aggie teams in fruit and livestock won first places in their respective contests.

On the committee which had charge of the fruit exhibit at the Fair were Director Smith, County Agent Smith, C. M. Wood, and G. A. Meigs. Director Smith is also a member of the Executive Committee of the Essex Agricultural Society.

EVENING POULTRY COURSE TO BEGIN TUESDAY, OCTOBER 8

The fourth annual Evening Poultry Course opens Tuesday, October 8, 1929, at 7:30 P. M. and continues on Tuesday and Thursday evenings through December 17.

This course will be conducted by Instructor J. S. Bennett, of the Poultry Division of the Essex County Agricultural School, and is limited to 20 members, men or women, residents of Essex County, over 15 years of age.

COUNTY HOME ECONOMICS EXTENSION COMMITTEE HOLDS ITS FIFTH BUSINESS MEETING AT ESSEX AGGIE

The first meeting of the season is an important one for the County Home Economic Extension Committee. At this time we plan our program for the year, discuss goals adopted at the annual meeting in May. A general round-table discussion aids much in our work toward this goal.

The following women make up the County Extension Committee for the year 1929-1930: Miss Marion Parker of Beverly, chairman; Mrs. E. Robert Little of Boxford, vice-chairman; Mrs. C. S. Wright of Danvers, secretary; Mrs. Mason Downing of North Andover, Mrs. Harold Knapp of Newbury, Mrs. H. K. Richardson of Middleton, Mrs. Bernard J. Manning of Amesbury, Mrs. Earl Bessom of Marblehead, Mrs. George Mitchell of Groveland, Mrs. John Goodhue of Ipswich, and Mrs. Fred P. Kilham of Hamilton.

COMMUNITY WOMEN FORM EXTENSION COMMITTEES FOR 1929-1930

Several communities have already formed their Extension Committees for the year 1929-1930. We notice with pleasure that many have carried out the suggestion made at our annual meeting, that at least one member be a farm woman and one the mother of young children. The following are the community committees chosen to date:

Beverly, Miss Marion Parker, chairman, Mrs. Alvah J. Bradstreet and Miss Dora L. Edwards. *South Groveland*, Mrs. Frank N. Spofford, chairman, Mrs. John Garrety and Mrs. John Malone. *Ipswich*, Mrs. John W. Goodhue, chairman, Mrs. Charles Canney and Mrs. Walter Hulbert. *Groveland*, Mrs. George Mitchell, chairman, Mrs. A. H. Amazeen and Mrs. Gardner Wood. *Ballardvale*, Mrs. Walter E. Curtis, chairman, Mrs. Elwin Schyer and Mrs. Alvin Zink. *Peabody*, Mrs. Frank Taylor, chairman, Mrs. David Craig and Mrs. Herman G. Barnes. *Haverhill*, Mrs. Percy Callahan, chairman, Mrs. Walter Eaton and Mrs. George Baker. *West Newbury*, Mrs. E. Spencer Poore, chairman, Mrs. Horace W. Brown and Mrs. Gilbert Tucker. *Lynnfield* Center, Miss Elizabeth Green, chairman, and Mrs. B. Warren Skinner. *Boxford*, Mrs. E. Robert Little, chairman, Mrs. Geraldine Moore, Mrs. Clara Bixby and Mrs. Betsy Peabody. *Danvers*, Mrs. Roger F. Conant, chairman, Mrs. E. P. Guppy and Mrs.

A. Molitor. *Newbury*, Mrs. Bertram E. Savage, chairman, Miss Amelia W. Little and Mrs. Ernest Dower. *Amesbury*, Mrs. Bernard Manning, chairman, Mrs. J. J. Merchant and Mrs. Leon Twine. *Saugus Center*, Mrs. Ross Coon, chairman, Mrs. G. C. Woodsum and Mrs. George Shea.

CLOTHING SELECTION GROUP MEETS IN SAUGUS

The first of four meetings in clothing selection will be held in Saugus Center Grange Hall on September 25, from 10.30 a. m. to 3.30 p. m. These meetings are open to all homemakers interested in the "Well Dressed Family." Any one of the following women will give you further information: Mrs. Ross Coon, Saugus; Mrs. G. C. Woodsum, Saugus; Mrs. George Shea, Saugus; Mrs. Lilla Merrithew, Cliftondale; Mrs. Mildred Perry, Golden Hills; Mrs. William Atkinson, Cliftondale; Mrs. George Gosselin, East Saugus; Mrs. Ellery Metcalf, Saugus; Mrs. F. H. Coburn, Saugus, and Mrs. T. A. Marsden of Cliftondale.

MRS. RUTH D. MORLEY CONDUCTS CHILD GUIDANCE GROUP

The extension project in Child development and Parental Education is being introduced in the state this year by Mrs. Ruth D. Morley, who will co-operate with the Home Demonstration Agent in conducting study groups in various parts of the county.

This project consists of five lessons: Parent Relationships, Education through Play, Habit Formation, Obedience and Discipline, and Emotional Development of the Child.

Communities within easy access of Essex Aggie are sending two delegates for this project, which opens on October 16. Anyone wishing to be one of two delegates should consult her town chairman.

WOMEN LEARN NEW WAYS TO PREPARE VEGETABLES

Miss Foley, our Nutrition Specialist, has prepared a new project called Vegetable Preparation. This project will be conducted under project leaders. Several groups about the county have already been formed. Miss Foley will conduct one training school for leaders, and the Home Demonstration Agent will conduct the others.

This project is prepared in the hope that: 1, The importance of vegetables in the diet will be recognized. 2, Vegetables will be put in the child's diet before he is a year old. 3, Every member of the family will learn to like vegetables. 4, Meals will be planned around the vegetables. 5,

Vegetables will be cooked in a manner that will make them attractive, palatable and nutritious. 6, A green or raw vegetable will be eaten by every member of the family every day. 7, Two other servings of vegetables every day, one of which may be potato, will be eaten by every member of the family. 8, Vegetables will be purchased and used to insure the best returns for the least amount of money.

THE DEGREES OF MEMBERSHIP FOR FUTURE FARMERS OF AMERICA

It is interesting to note how the F. F. A. organization stimulates serious effort on the part of its members.

Four degrees of membership are provided for in the constitution: "Green Hands, Future Farmers, State Farmers, and American Farmers." Progress from one degree to the next depends solely upon the accomplishments of the boys.

Any boy studying vocational agriculture who is 14 years old and who has the facilities for conducting some farming enterprise of his own may become a "Green Hand." Before he can pass to the second degree, that of "Future Farmer," he must have saved at least \$25 from his farm earnings, must be able to conduct a group discussion for 10 minutes, and repeat the Future Farmer's Creed from memory. These two degrees, with appropriate ceremonies, may be conferred by local chapters.

The F. F. A. provides for a well-organized state association. Once each year a rally or convention is held. At this meeting the degree of "State Farmer" may be granted to those boys recommended by the local chapters who can show that they saved or invested from their earnings at least \$200; who can lead a group meeting for 40 minutes; pass any occupational test that may be required; show marked attainment in scholarship; possess qualities of leadership; and have represented the school or local chapter in some creditable manner. Only boys who have completed two years' systematic training in agriculture can hope to meet all of these requirements.

The fourth and highest degree, that of "American Farmer," is awarded at national conventions and given only to boys who have achieved distinction in farming. Such boys must have saved \$500; participated in some co-operative effort; have demonstrated leadership ability; and have established themselves in some farming occupation.

—From "The Breeder's Gazette," July, 1929.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 10

LATHORNE, MASS., OCTOBER, 1929

NO. 10

FATHER AND SON COOPER- ATE IN GREENHOUSE AND NURSERY PROJECT

Franklin Ellis of Methuen, who with his father is joint owner of the greenhouse illustrated above is a member of the Senior Class at the Essex County Agricultural School. He built his greenhouse in 1925, while yet in High School, and stocked it the following spring with bedding plants which he sold in the neighborhood.

The next summer he installed a hotbed, and later a cold frame in which plants are hardened off or wintered over.

Last spring he broke up the old orchard sod, and planted squash and sweet corn as cash crops and to clean the land of witch grass. He also set out in nursery rows, hardwood cuttings of shrubs made at School in his Ornamental Gardening class. These will form the basis for a regular nursery. Franklin also sold Delphiniums, Aquilegias, Sweet Williams, Gaillardias, and Scabiosas grown from seed sown by him in the spring of 1927. These perennials and an outdoor cut-flower garden supply the summer demand for bouquets.

Franklin now has a fine patch of Viola Jersey Gem from which he will grow a lot of plants from cuttings for spring sales.

The greenhouse is 16' x 24' with an 8' headhouse and boiler room. The winter crop is Carnations, and the side benches will carry over bedding stock. Four thousand thrifty Pansy plants are bedded out in a conspicuous place for the Memorial Day trade. Of hardy herbaceous perennials there are nearly one thousand seedlings for lining out in the nursery another year.

Franklin has carried out some bedding contracts for his plant customers, and is planning the development of a general home grounds planting service with his home acres and greenhouse as a supply station for plant materials.

—H. L. WHITE.



FRANKLIN ELLIS, ESSEX AGGIE 1910, IS DEVELOPING GREENHOUSE AND NURSERY IN METHUEN

BEES INCREASE YIELD SIX TIMES

Shortly before blossom time this spring, two 10-year-old McIntosh trees in the orchard at the Massachusetts Agricultural College were enclosed in separate cages of tobacco cloth. A small hive of bees was put under each tree. In addition, under one of the trees was placed in a pail of water a liberal bouquet of Wealthy and Delicious apple branches, thus providing cross-pollination for one tree and self-pollination for the other.

At harvest time the cross-pollinated tree had a crop of 251 apples. The other had 39 apples.

Both trees had a heavy bloom and the tree which was supplied with the bouquet was somewhat smaller than the other, which gave it a slight handicap; but in spite of this it bore more than six times as many apples as the self-pollinated tree.

Thus we see that cross-pollination is practically necessary for McIntosh apples, but it should not be understood from this experiment that Delicious and Wealthy are necessarily the best pollinizers for McIntosh. Other varieties, such as Oldenburg, Ben Davis, Astrachan, etc., are probably as good and in some cases better.

—G. O. Elson.

ALUMNI BANQUET AND DANCE, NOVEMBER 26

The Essex Aggie Alumni Association banquet and dance will be held at Lathorne after the graduation exercises on Tuesday, November 26. Following a short business meeting of the Association the Alumni and faculty of the school will gather in the Homemaking Building for the annual banquet. Last year the Class of 1918 held a very successful reunion, having a special table and speakers at the banquet. This year members of the Class of 1919 should make a decided effort to return, thus establishing a custom for other classes to follow. The annual fall dance will immediately follow the banquet. Make your reservations now to Robert B. Ewing, Secretary-Treasurer, Essex Aggie Alumni Association. Address 106 Main Street, Brockton, Massachusetts.

FOOTBALL SCHEDULE, 1929

- Oct. 4. Dummer Academy.
- Oct. 11. St. Joseph's Juniorate.
- Oct. 19. Saugus.
- Oct. 26. Dedham.
- Nov. 2. Newburyport.
- Nov. 9. Stoneham.
- Nov. 16. Gloucester.
- Nov. 23. Open.
- Nov. 28. (THANKSGIVING DAY) Danvers.

All games are played away from home.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

Nov. 26. Graduation Exercises, Class of 1929, Peabody Institute, Danvers.

GRADUATION EXERCISES

The graduation exercises of the Class of 1929 will be held at the Peabody Institute, Danvers, on Tuesday, November 26, at 2 p. m. The class numbers 56 and is one of the largest classes to graduate from this school. Members of the class will have speaking parts on the program, and the School glee clubs and orchestra will also take part. During the exercises the annual prizes offered for agricultural, homemaking, and academic accomplishment will be presented. Admission to the exercises will be by tickets, which may be obtained from members of the class or from the Director of the School.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

With the return of the upper-class students the total enrollment is now 343. Two hundred of these are registered in the Agricultural Department while the Homemaking Department has 143 enrolled at the present time. Topsfield and Nahant are the only towns without representation in either department.

Saugus sends the largest number of students, with a total of 33. Other towns and cities sending large numbers of students are as follows: Danvers, 30; Lawrence, 28; Salem, 25; Haverhill, 23; Lynn and Peabody, 22; and Andover, 21.

CLASS GIFT

The gift of the Class of 1929 is to be a strip of cement walk, located about half-way between the Agricultural and Homemaking buildings. Bronze numerals "1929" eight and one-half inches in size are to be imbedded in the easterly end of the walk so as to be easily read when approaching the Agricultural building.

The bronze numerals were made and donated to the class by Mr. Tor Torsen of Lynn, father of Miss Grace Torsen, a member of the graduating class.

The construction of the walk is in charge of Instructor Hardy and the work is being done by students now at the School. The Class of 1929 is paying for all materials used in the construction of the walk, which is about five feet wide and forty-two feet in length.

—E. E. METCALF,
Senior Class Advisor.

ALUMNI NOTES

AGRICULTURAL DEPARTMENT

ANDERSON, C. DONALD, '23, manager New York State Egg Laying Contest. Address, Alexander Avenue, Farmingdale, L. I. Married.

BLOOM, ERNEST R. '19, employed by Thomas Toland, 432 Malden St., Revere.

DUNCAN, JAMES F., '23, Superintendent of Parks. Address 83 Western Ave., Gloucester.

HOLMES, OLIVER E., '24, Preston Oriente, Cuba. Employed by the United Fruit Company. He called at the School in September while on a visit to his home in Swampscott.

HUNNEWELL, SPENCER E., '25, student at aviation school, learning to be transport pilot. Address 319 Twelfth St., Milwaukee, Wisconsin.

KONDRUP, HANS C., '16, address 99 Gould St., Wakefield.

MACKENNA, ROSCOE B., '26, engaged in printing and advertising business, specializing in horticultural work. Address, Packard Printing Co., 116 Broad St., Boston. He has visited the school several times recently.

MOOERS, ROBERT L., '23, caretaker of the James H. Walker estate. Address 145 Main St., Amesbury.

MORELAND, WALLACE S., '21, in charge of press service, Agricultural Experiment Station, New Brunswick, New Jersey. Visited the school while on a short vacation in August.

NELSON, ROBERT E., '19, private estate work. Address 6 Highland Place, Gloucester.

PLUMMER, EDMUND G., '24, salesman for S. D. Woodruff & Sons, Orange, Conn.

PLUMMER, ROLAND B., '25, assistant herdsman, Chedco Farm, Berlin.

POLLOCK, ROBERT W., '22, general farming, North Brookfield.

POOR, C. RAYMOND, '18, employed with the Richfield Oil Company. Address 3427½ East 7th St., Long Beach, California.

RICHARD, IRENEE T., '19, employed by J. Y. Gillispie Co., Dorchester. Home address 10 Carlisle St., Roxbury.

ROBINSON, ERNEST F., '24, address 255 Haverhill St., Methuen.

HALE, NATHAN S., '23, student at M. A. C. Home address Weathersfield St., Rowley.

TROW, NATHANIEL D., '25, Aircraft motor mechanic. Home address 498 Elliott St., Beverly.

SUMMER PROJECTS OF HOMEMAKING STUDENTS

Reports of summer projects, many of them accompanied by interesting pictures, may be found in the office of the Homemaking Department. A large proportion of the senior girls were placed in employment in the commercial and professional field. The younger girls carried projects in *Food, Clothing, Gardening, Canning, Interior Decorating* or *Child Care* in their own homes.

Some of the outstanding projects are as follows:

CURTIS, RUTH, of Topsfield.

Cook, Fleur de Lis Camp, Fitzwilliam, N. H.

NICKETT, NORMA, of Haverhill.

Camp dietitian, Girl Scout Camp, Gloucester.

STULTZ, RUTH, of Ipswich.

Tea-room housekeeper, Burnham Tea House, Ipswich.

MONSELL, IDA, of Amesbury.

Teacher of canning, Greenleaf and Fox Schools, Haverhill.

MESSER, VIOLA, of Methuen.

Teacher of canning, Tilton and Greenleaf Schools, Haverhill.

HILTON, MIRIAM, of Danvers.

Assistant in handicraft, Middleton Health Camp.

SKONICKI, HELEN, of Salem.

Tea-room assistant, Israel Putnam House, Danvers.

SPROULL, LOUISE, of Byfield.

Assistant in diet kitchen, Anna Jaques Hospital, Newburyport.

SENIOR, RITA, of Byfield.

Tea-room assistant, The Elms, Nahant.

ST. JOHN, ENAISE, of Danvers.

Tea-room assistant, The Pines, Gilman, N. H.

STEARNS, RUTH, of Salem.

Tea-room assistant, The Pines, Gilman, N. H.

—G. A. GILKEY.

MANY SCHOLARSHIPS WON BY ESSEX COUNTY 4-H CLUB MEMBERS AT THE FAIRS

This year a contest in canning was held at Topsfield Fair at which the Ball Jar Company of Muncie, Indiana, offered a State Scholarship prize of \$50. This contest was held at eight other county fairs and the contestants were scored by points. There were three parts to the contest. First, the contestant must exhibit to display ability to can. Second, she must judge several classes of fruits and vegetables. Third, she must give an oral presentation on canning.

Each contest was judged by Professor Cole of Massachusetts Agricultural College. The winner of the contest in this county was Mrs. Alice Messer. On the final decision for the State prize she had the second highest score, therefore winning second prize of eight dozen assorted Ball jars.

Essex County also sent judging teams in fruit, vegetable and livestock to Brockton Fair where they competed for scholarship prizes offered by the Brockton Fair Association and commercial organizations.

The fruit judging team was composed of Bradford Webb, Arthur Gordon and Ernest Blaney, placing first, third and fourth, respectively. Webb and Blaney are students of Essex Aggie, and Gordon is a graduate.

In the vegetable contest there were but two contestants from this county, Sydney Batchelder and Walter Lewis, both of Andover. Batchelder succeeded in tying with another boy for first prize, thus winning another scholarship.

The livestock judging team was Earle Blake, Charles Elwell, Lester Knowlton and Lawrence Westcott, all of the Aggie School and also Silas Little, Jr., and Dorothy Colby of Newbury. Silas Little, placing fifth out of thirty-five contestants, was the only member from Essex County to place within the first ten places.

Each of the first prize winners will receive \$60. to be used for further education in some agricultural college.

—HORACE J. SHUTE.

4-H CLUBS NOW BEING ORGANIZED

4-H Clubs are now being organized under local leaders in all parts of the county. The County Club Agent is offering many projects for boys

and girls, among which are clothing, food, handicraft, forestry, poultry, room beautiful, lunch-box and supper clubs. These projects are to be especially emphasized this year.

The young people of Essex County are anxious to take up work of this kind, but it remains for interested adults to organize them into clubs and act as local leaders.

—H. J. S.

CORNBORER CONTROL

Backyard gardeners in or close to cities are harboring cornborers and making it much harder to control the pests in the adjoining farm lands, according to R. H. Allen, director of the division of plant pest control of the State Department of Agriculture. The efforts of the division have been concentrated very largely on the important task of getting farmers and market gardeners to plow under the corn stubble before December 1st each year, as an effective measure of cornborer control. It is apparent that the backyard gardeners are not conforming to the law as they should. A definite drive is being inaugurated to acquaint them with the provisions of the law and to follow it with a careful checkup to see that they conform to it.

EVENING SHORT COURSE IN DAIRYING

The School will offer a ten weeks' course for milk producers, dealers, distributors and inspectors beginning Wednesday evening, October 23rd. The class will be limited to twelve members, and instruction will be given by the instructors of the Dairy Division of the School, assisted by the County Agricultural Agent and necessary outside specialists.

The following will be some of the subjects covered in the course: Testing of milk for butter fat; total solids; sediment; acidity; adulterations and preservatives; watering; skimming; the methylene blue test for keeping quality; the detecting of flavors and their cause; scoring of milk; bottles and caps; bacteria, good and bad; detecting causes of high bacteria; milk borne diseases and how to avoid them; the equipment for cooling, handling, pasteurizing, and the operation of the same; defects and how to overcome them; legal requirements; milk regulations; farm scoring; milk houses, etc.

The cost of the course will be \$3.00, assessed to partly cover laboratory fees. The time will be 7:30 to 9:30 P. M. every Wednesday. Interested parties should enroll at once because of the limit of twelve members.

For further information and enrollment, address the Director, Essex County Agricultural School, Hathorne, Massachusetts.

WEATHER SUMMARY FOR JULY, AUGUST, SEPTEMBER

	July	August	September
Maximum temperature and date	93 (28th)	90 (1st)	95 (3rd)
Minimum temperature and date	44 (3rd)	43 (21st)	36 (22nd)
Average daily temperature	70.1°	66.8°	62.1°
Normal (Boston)	71.6°	69.9°	63.7°
Greatest daily range	36° (23rd)	36° (21st)	43° (24th)
Least daily range	6° (25th)	3° (13th)	3° (9th)
Precipitation	.85"	2.75"	2.29"
Normal (Boston)	3.39"	3.55"	3.08"
Deficiency	2.54"	.80"	.79"
Total for year to Oct. 1	.....	.....	28.82"
Normal (Boston)	.....	.....	30.15"
Deficiency to date (Oct. 1)	.....	.....	1.33"
Average relative humidity 8 A. M.	72.2%	75.9%	82.6%
Number days rain fell	6	9	10
Number clear days	21	14	15
Partly cloudy days	7	14	6
Cloudy days	3	3	9
Total hours sunshine	344	282	215
Percent sunshine	74.4%	65.7%	57.3%

Probably the outstanding feature of the period has been the dry weather, notably July. In both August and September considerable more rain was recorded at the School than in Boston due to variations in local showers; consequently while there is a shortage of 1.33" here the Boston figure is 2.78". July was an unusually sunny month. A notable feature was the September maximum temperature, also the absence of any killing frosts at the School during September.

—H. A. MOSTROM.

'ROUND ABOUT THE COUNTY WITH THE HOME DEMONSTRATION AGENT

Fall work with women in Extension groups has started in many communities. We are glad to welcome into the Extension family several new community groups: Lynnfield Center, North Saugus, South Byfield, and Bradford.

The following projects have started: *Garment Finishes*—Peabody, Rocks Village.

Garment Making—Rocks Village.

Clothing Selection—Saugus.

Furniture Renovation—Lynnfield Center, Essex, Newbury.

Vegetable Preparation—Beverly (2 groups), Danvers (2 groups), Middleton, Essex, Riverside, South Groveland, Bradford, West Boxford, North Andover, Marblehead.

Home Nursing—Ballardvale, South Byfield, Essex, Salisbury.

Child Guidance—Hathorne—Representatives from Danvers, Beverly, Marblehead, Middleton, North Andover, Saugus, Peabody, Boxford.

—M. P. CRAWFORD.

CLOTHING SELECTION IN SAUGUS

The first meeting in clothing selection conducted by Miss Esther B. Cooley, State Clothing Specialist, was attended by fifty-one women, coming from seven different communities. Saugus Center, Cliftondale, North Saugus, East Saugus, Lynnhurst, Oaklandvale, Pleasant Hills, and Peabody were represented.

The talk on "Color" was illustrated with beautiful material and many women discovered that they could wear colors which they have always admired but did not have the courage to wear.

The next meeting on "Lines" will be held on the afternoon of October 23.

SWEETS FOR THE FAMILY

Prepared by MAY E. FOLEY,
State Nutrition Specialist

The average American spends yearly ten dollars for candy and twenty-nine cents for health, as pointed out by the Boston Medical and Surgical Journal. Our forefathers ate eleven pounds of sugar per person. The average consumption today is 126 pounds per person.

Sweets in themselves are not harmful. Sugar is an energy-producing food, but has no building value. The real danger in the use of too much

sugar is that excessive use of sweets dulls the appetite and takes the place of building and regulating foods. It is well, when adding sugar to the diet, to see that it is used in combination with other important foods.

Simple desserts, which will satisfy the desire for sweets, and at the same time help to make a better balanced diet, are recommended for all members of the family.

COSTS LESS TO EDUCATE HEALTHY CHILDREN

As a result of continuous medical supervision of school children, the number that do not finish their work in the specified time has been reduced from 49 per cent to 23 per cent in the last ten years, says the health department of Maryland.

Losing less time from sickness has made it possible for many children to complete their work without interruption.

This medical supervision serves a double purpose. First and most important is the correction of unfavorable conditions that might be serious handicaps to the children's development. There is also an advantage to the taxpayer, in that it costs the state less to educate a child who finishes his work without having to repeat it.

—Hygeia.

VEGETABLE PREPARATION

One group of project leaders starts the vegetable preparation project in Beverly on October 15 under Miss Foley, State Nutrition Specialist. Another group, starting in Riverside on October 18, is under the direction of Miss Crawford, Home Demonstration Agent.

SCHOOL NOTES

The Essex Aggie Staff Club held the first social of the year on Wednesday, October 2, in Agricultural Hall. The event was in the nature of a costume party with stunts and old-fashioned dancing, music for which was furnished by Mr. Austin Noyes, violinist; Miss Rand, pianist, and Mr. Fuller of Newburyport, prompter. Refreshments were served.

The first assembly of the two departments was held Friday, October 11. Mr. R. O. Small in charge of Vocational Education in Massachusetts was the speaker.

The Class of 1931 is making plans to entertain the faculty and student body at a Halloween party to be held during the latter part of October.

LIBRARY PROJECT OF HOMEMAKING DEPARTMENT SUCCESSFULLY CARRIED ON BY STUDENTS

Early in the school year beginning September 1928, all the English classes in the Homemaking Department were given instruction in library practice. The girls rearranged the books in class order according to the Dewey System which is used in nearly all public libraries. Pocket cards were made for all the books so that a systematic loan system could be maintained and the school could have a check on the books that were borrowed. Girls in the senior division acted as librarians as part of their class work.

During the winter vacation, open shelves were built along the entire side of the room used for the library. These shelves replaced the steel lockers which had been formerly used to hold the books. Mr. Hardy of the Agricultural Staff, who built these shelves, is to be complimented on the fine appearance the library now presents.

A permanent student librarian was decided upon as well as definite library hours. The students learned what a library is for, where and how books could be located by shelf numbers, and how to check books out of a library.

This fall the library has been used with renewed interest. New textbooks have been added from the library fund. From the dues collected from overdue books, new books of popular interest have been added. As the year has advanced, the number of books checked out each day has increased.

On Friday, September 27, 1929, the girls checked out 124 books. During the past two weeks the daily average has been about 100 books. One librarian could not handle the work in the limited time allotted, so two girls are now on duty during the noon hour.

Credit is due Miss Eleanor McGlew of Newburyport, who served as librarian during the month of September, and to Miss Ellen Hadley of Essex and Miss Veronica Marquis of Lawrence, who are serving during the month of October, for much of its success at the present time. Splendid cooperation and business-like workmanship have been maintained throughout their work.

—VERNA L. CLARKE.

ESSEX FARMER AND HOMEMAKER

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VOL. 10

HATHORNE, MASS., NOVEMBER, 1929

NO. 11

ESSEX AGGIE STUDENT MEMBER OF STATE DAIRY JUDGING TEAM

This School may well take pride in the fact that one of its students, Lawrence Westcott of Melrose, was selected from a large field of candidates to be a member of the dairy judging team which represented this State at the National Dairy Exposition in St. Louis, October 12-20.

Lawrence Westcott entered Essex Aggie in September, 1928, after completing three years in the Melrose High School. He became interested in dairying and was herdsman at the school for his first year's project. He has judged dairy cattle at Topsfield and also at the Massachusetts Agricultural College, and because of his record in judging was selected as one of the three vocational agricultural students to represent this State.

The other two boys who made up the team were Russell Rice of Ashfield and Herbert Given of the Bristol County Agricultural School. David Millard, Instructor of Dairying at the

Bristol County Agricultural School, was selected coach and accompanied the team to St. Louis.

At the Exposition the four principal breeds of dairy cattle were judged, with the Ohio team placing first and Massachusetts fifth, competing against 35 teams from all parts of the United States. In the individual scores, Lawrence Westcott placed first in the Guernsey class, Russell Rice third in the Ayrshire class, and Herbert Given fourth in the Holstein class. In judging all four breeds Given received fourth place.

1919 REUNION

The Class of 1919 will hold a reunion at the School on Tuesday evening, November 26, following the graduation exercises. A committee of the Class has completed arrangements and a large number of the Class are expected to return to take part in the festivities.

GRADUATION

On Tuesday, November 26, the second largest class in the history of the School will receive their diplomas. The fifty-four members of the Class represent twenty-one different cities and towns in Essex County.

The graduation exercises will be held in the Peabody Institute Hall, Sylvan Street, Danvers, and will begin at 2:00 P. M. The principal speaker will be Mr. Charles H. Eglee of Brookline. The student speakers will be Miss Edna Bamford of Middleton, Miss Enaise St. John of Danvers, and Mr. Robert Moulton of Lynnfield. There will be music by the School Orchestra and vocal selections by Miss Grace Torsen of Lynn. Mayor Ralph S. Bauer, President of the Board of Trustees, will present the diplomas.

Following the graduation there will be the usual Alumni events at the School. This will include a business meeting, an annual banquet and a dance.



First Row—Kelly, Cahill, Haley, Vice-President Dickinson, President Turner Brander, Nelson, Berry, Mansell.
Second Row—Bean, Sproull, Senior, Sec. Torsen, Treas. Jaquith, Sharples, Nickett, Sullivan, Stearns, Jones, Laughton.
Third Row—Hudson, Wilson, Wells, Bamford, Monsell, Skoniecki, Bourne, Gross, Doyle, Freiwald, Steele, Magee.
Fourth Row—Miss Harris, Bredbury, Carlsen, Williams, Ridderstrom, Hilton, Watson, Wilkins, Ruxton, Armstrong, Mr. Metcalf.
Fifth Row—Cashman, Curtis, Messer, Howard, Reed, Pingree, St. John, Newhall, Stultz.
Sixth Row—Ellis, Anderson, Moulton, Fuller, Batchelder, Winn, Gordon, Winkley, Roberts, Henderson.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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CALENDAR

November 26. Graduation Day.
November 27. Thanksgiving Recess begins.
December 2. School reopens.
December 18. Christmas Recess begins.
January 2. School re-opens.

N. A. C. FORUM ON WBZ— WBZA

MONDAYS AT 6:15 P. M.

Nov. 25—Winter Protection of Shrubs. L. S. Dickinson.
Dec. 2—Winter Protection of Plants. S. C. Hubbard.
Dec. 9—Good Poultry Feeding Practices. Luther Banta.
Dec. 16—What Sheep are Doing for N. E. Farmers. G. V. Glatfelter.
Dec. 23—The New Fertilizers from the Air. R. W. Donaldson.
Dec. 30—Poultry Housing. W. C. Sanctuary.

SPENCER E. HUNNEWELL CLASS OF 1925

We are grieved to hear of the death, in a motorcycle accident near Chicago, of Spencer E. Hunnewell of Saugus, class of 1925. For some time past he had been a student in an airplane construction and flying school at Milwaukee, Wisconsin. He was a student at Essex Aggie from 1921 to 1925 and distinguished himself in both agricultural project work and scholarship. We extend sympathy to his parents, Mr. and Mrs. Irvin Hunnewell, in their bereavement.

ALUMNI NOTES

AGRICULTURAL DEPARTMENT

COLLINS, BERNARD, '27, writes that he is now working on Ex-Governor Fuller's estate in New Hampshire. His work is with the poultry and he states that he likes it very much.

DWYER, BROOKS, '24, announces the arrival of Alice Brooks on October 25th. He also gives us a new address, 541 Centre Street, Jamaica Plain.

ELLIS, HENRY L., '27, is attending Bryant and Stratton's Business College in Providence, Rhode Island.

GOULD, RICHARD M., '28, and RUTH E., '25, have sent us a new address, 86 Oxford Avenue, Cambridge. NICHOLS, IRVING T., '25, and Miss Helen L. Bickford of Gloucester, were married on October 5, 1929.

STICKNEY, G. WALLACE, '26, and Miss Louise A. Grover were married on September 15, 1929.

STOWELL, WILLIAM E., '25, is engaged, we have heard.

HOMEMAKING DEPARTMENT

CHURCHILL, MARION E., '27, has been married but we do not know just when it happened.

EGERTON, ELIZABETH B., '24, and Mr. Walter Raymond Gower were married on August 11, 1929.

EMMETT, EVELYN L., '27, and Mr. Ernest Eastman were married and are now living in Cliftondale.

MacWILLIAMS, DOROTHY J. (Mrs. Edward Averill), '27, has written a most interesting and newsy letter in which she tells us of her little daughter. She would be glad to hear from her "Aggie" friends.

LOCAL FARM TO ENTER NATIONAL STOCK SHOW

To an Essex County establishment, Bald Hill Farm of Beverly, goes the distinction of having made the first entry from Massachusetts to be received for the International Live Stock Exposition, to be held at Chicago this year November 30 to December 7.

According to the exposition's management, Bald Hill Farm, of which Quincy A. Shaw 2nd is proprietor, will send a flock of nine Dorset sheep to the Chicago Show, which is held to be the climax of each year's agricultural show season, the winners of shows all over the country being assembled at this exposition to compete for the crowning honors of the year.

In past years this farm has, by its winnings in the keenly competitive contests at the International Live Stock Exposition, done much to maintain the Bay State's claim to fame as a source of choice pastoral stock.

SCIENCE DAY

The fifth annual Science Day at Essex Aggie was held in the Agricultural Hall on Friday, November 8. The speaker for the occasion was Prof. C. F. Whitney of Danvers, who delighted the audience with a talk on "The Beauties of Nature," illustrated with blackboard sketches.

Prizes were awarded to the following students for the most creditable exhibits.

SWEEPSTAKE MEDALS

Ernest Blaney—Senior, first prize—Gold Medal.

Norman Colville—Junior, second prize—Silver Medal.

Woodbury Bartlett—Junior, third prize—Bronze Medal.

PRIZE AWARDS BY CLASSES (RIBBONS)

Seniors—First, Ernest Blaney; Second, Herbert Kirk.

Juniors—First, Norman Colville; Second, Woodbury Bartlett; Third, Charles Cook.

Sophomores—First, Augustus Canney; Second, Edward Hale; Third, William Hay.

Freshmen—First, Donald Aylward; Second, Joseph Cote; Third, Richard Bailey.

FOOTBALL, 1929

After the victory over Gloucester, the football squad is directing its attention to the final game of the season, to be played with Holden High at Danvers Park, on Thanksgiving Day morning. It is expected that a large number of students and alumni will attend.

Aggie, Opp.

Oct. 4.	At Dummer Academy	35	0
Oct. 11	At St. Joseph's		
	Juniorate	27	0
Oct. 19	At Saugus	15	0
Oct. 26	At Dedham	0	25
Nov. 2	At Newburyport	0	25
Nov. 9	At Stoneham	6	26
Nov. 16	At Gloucester	6	0
	Thanksgiving—At Danvers	?	?

FIFTEEN GROWERS IN STATE PRODUCE 90% CLEAN FRUIT

Nine apples out of every ten free from disease or insect blemishes was the goal of 210 fruit men in Massachusetts this past year.

Fifteen of that number reached the goal and are now recorded as members of Massachusetts' first "90 Per Cent Clean Apple Club," which was sponsored by the Massachusetts Agricultural College, under the direction of W. H. Thies, extension specialist in pomology.

ESSEX COUNTY POULTRY FLOCKS EXCEPTIONALLY FREE FROM DISEASE THIS FALL

Better methods and more careful work on the part of the poultrymen in the matter of sanitation is the answer to healthy flocks in Essex County this fall. The writer firmly believes that commercial poultrymen have at last been brought to realize the importance of keeping land, buildings, equipment and the stock clean, and as a result the general health is improved. For the past four years, by November 1, 50% of all the birds in Essex County have had chicken-pox. This year, up to the present time, only three or four flocks have come to the attention of the writer as affected with this contagious disease. Among other things that have been accomplished this season is vaccinating flocks to prevent chicken-pox. This was carried on throughout the county on a large scale. We know of 110 flocks that were vaccinated, representing more than 10,000 birds. While vaccination for chicken-pox is a new practice and hasn't been in use long enough to give many definite results, at the present time all indications point to the fact that this dread disease is controlled in this manner. The demand for eggs in Essex County this fall has been greater than ever before, and anybody who has had early hatched pullets has been able to show a good profit with them during the past two months. We are recommending an ample supply of green feed, if possible, for the birds, together with a moist mash fed at noon time from now on, and the use of electric lights either morning or night, or both, to give the birds a twelve-hour day. We believe these practices are sound and will produce satisfactory results.

—W. B. MOORE.

SURVEY SHOWS LARGE COWS MOST ECONOMICAL PRODUCERS

The small, refined dairy cow may look best, but the big, roomy cow pays most profit to her owner, according to a survey made by the United States Department of Agriculture. In making the study, large and small cows within one breed were compared, both purebreds and grades of every age being included.

On an average the largest cows—those weighing 1,500 pounds—exceeded the smallest cows—those weighing 800 pounds—by 98 pounds of butterfat per cow. Their cost of feed was \$20 higher, but they returned \$43 more

per cow in yearly income over cost of feed.

An analysis of figures obtained in the survey shows that as size of cow advanced 100 pounds for each group there was a fairly uniform gain in production of milk and of butterfat, in cost of feed per cow, and in income above feed cost. On the other hand, there was a slight decrease in the butterfat test, but this was not enough to merit special attention.

Though the group figures always favored the large cows, it was found that many individuals among the large cows in each breed were unprofitable producers and that many small cows in each breed were profitable producers. Therefore in selecting dairy cows of any breed it is not wise to select on the basis of size alone. Size, however, is a factor of great importance.

—F. C. S.

The State Department of Agriculture is warning farmers and market gardeners that "Ueco Insecticide," advertised as a sure death remedy for corn-borers, is not recognized for that purpose, and that its use will not in any way free them from the State regulation that all corn stubble in the quarantined area must be plowed under not later than December 1. This is the control measure which has been used with success in Massachusetts for several years past and is the only preventive measure which will be approved by the State Department of Agriculture, which has the control work in its charge.

"Ueco Insecticide" first came to the notice of the State Department of Agriculture a few weeks ago, when a farmer asked for information as to how effective it was. The representative in charge of the cases arising from the disregard of the laws in corn borer control work, apple inspection, and other regulatory work of the Department, was already aware of the standing of "Ueco Insecticide" situation, as reports had reached the office from several other states where shipments of it had been seized and destroyed as being falsely labelled. The reports were of court cases where the insecticide had been analyzed and found to be without value for the control of corn-borers or other insects of a similar nature. The reports stated that the insecticide was largely water containing harmless ingredients.

EVENING POULTRY CLASS FOR ADULTS INCLUDES PRACTICAL DEMONSTRATIONS

Tuesday evening, October 8, was the opening night of the fourth Short Unit Class in Poultry Husbandry for adults. A class of twenty was selected from a large number of applications and met with the new instructor in the poultry department, Mr. J. Stanley Bennett. The classes are being held every Tuesday and Thursday night from 7:30 to 9:30, and will continue until twenty-one lessons have been completed on Thursday evening, December 19. At each lesson, one hour, from 7:30 to 8:30, is spent by the instructor on some definite assigned subject, textbook assignment and definite written records, together with a talk by the instructor on that subject. The next half-hour, from 8:30 to 9:00, a practical demonstration is given on the plant. Some idea of what is being done during this half-hour can be gathered from stating that at the first lesson members of the class were shown how to candle market eggs and pack them in retail and wholesale containers. The next lesson they were shown how to properly stick and pick a bird. In the third lesson they were shown how to draw one and prepare it for cooking. Then followed demonstrations of vaccinating birds for chicken-pox, blood-sampling birds for B. W. D. disease, placing hatchery eggs in hatching trays, starting a multiple type incubator and testing eggs for fertility at the end of the seventh day. Besides the class instructor, persons well known in the poultry world take part as speakers. Included among these are Mr. A. W. Doolittle of the H. K. Webster Grain Co., Professor J. C. Graham, W. C. Monahan and W. C. Sanctuary from the Massachusetts Agricultural College, and Professor A. W. Richardson, Extension man with the Wirthmore Company.

—W. B. MOORE.

HONOR ROLL HERDS FOR ESSEX COUNTY

Certificates are now being prepared by the National Dairy Association for the ninety-five Massachusetts herds which have averaged 300 lbs. or more of butterfat during the past year. The eight herds in this county to receive the certificates are:

Chester Abbot, Andover; W. D. Bragdon, Methuen; Essex County Training School, Lawrence; Hardcourt Inc., North Andover; I. H. Sawyer, Topsfield; Gilbert Tucker, West Newbury; Harvey Turner, Andover; Mrs. W. A. Wood, Hathorne.

CHILD DEVELOPMENT GROUP

STUDY EDUCATION THROUGH PLAY

Twenty-five women from ten different communities met in November with Mrs. Ruth D. Morley, State Extension Specialist in Child Development. "Education Through Play," was the subject developed. The advantages of play, interests of children, constructive toys, and play equipment for various ages were considered. Some time was spent on books and reading for children. At the next meeting in December, "Habit Formation" will be the subject. As our health, happiness and efficiency depend upon the habits we form all through life, this will be a most interesting subject.

—M. P. C.

WOMEN EAGER TO LEARN NEW WAYS OF PREPARING VEGETABLES

Nearly 300 women in the county are carrying on the Vegetable Preparation Project under leaders. Miss Foley, State Extension Specialist in Nutrition, is training one group, and the Home Demonstration Agent another group. At the second meeting held in Beverly and at Riverside, the food value and preparation of root vegetables was studied. Many attractive dishes were prepared.

—M. P. C.

GROUP MEETINGS CON- DUCTED BY HOME DEMON- STRATION AGENT AND ASSISTANTS DURING NOVEMBER

Nov. 1. Grange Program, West Peabody; Garment Finishes, Rocks Village; Home Nursing, South Byfield. Nov. 4. Furniture Renovation, Lynnhfield Center. Nov. 5. Garment Finishes, Peabody; Home Nursing, Salisbury. Nov. 6. Child Guidance, Essex County Agricultural School; Home Nursing, Essex. Nov. 7. Home Nursing, Ballardvale. Nov. 8. Garment Making, Rocks Village; Home Nursing, South Byfield. Nov. 12. Nutrition (Leaders), Beverly; Home Nursing, Salisbury. Nov. 13. Furniture Renovation, Newbury; Home Nursing, Essex. Nov. 14. Furniture Renovation, Essex; Home Nursing, Ballardvale. Nov. 15. Home Nursing, South Byfield; Garment Making, Rocks Village; Nutrition (Leaders), Riverside. Nov. 19. Extension Banquet, Essex County Agricultural School. Nov. 20. Home Nursing, Essex; Clothing Selection, Saugus. Nov. 21. Home Nursing, Ballardvale; Furniture Renovation, Essex. Nov. 22. Garment Making, Rocks Village. Nov. 29. Garment Making, Rocks Village.

—MARION P. CRAWFORD.

DREAMING

(A 4-H Club Song for Girls)

My home must have a high tree above its open gate,
My home must have a garden where little dreamings wait;
My home must have a wide view of fields and meadow fair,
Of distant hill, of open sky, with sunlight everywhere

My home must have a friendship with ev'ry happy thing,
My home must offer comfort for any sorrowing;
And ev'ry heart that enters shall hear its music here,
And find some simple beauty that ev'ry life may share.

My home must have its mother, may I grow sweet and wise,
My home must have its father with honor in his eyes;
My home must have its children, God grant the parents grace
To keep our home, through all the years, a kindly, happy place.

Written by MISS FANNIE BUCHANAN.

BOOKS FOR CHILDREN

Now that Christmas is approaching we know that you will find useful a list of books for children of different ages suggested by Mrs. Ruth D. Morley.

Up to Four Years.

The Golden Goose Book—Brooke.
Babies Own Aesop—Craze.
Pied Piper of Hamelin—Browning.
Four and Twenty Toilers—Lucas and Bedford.

Five to Seven Years.

Old Mother West Wind—Burgess.
Little Black Sambo—Bannerman.
The Cock, The Mouse, and Little Red Hen—LeFerve.

Peter Rabbit—Potter.

Seven to Nine Years.

Fairy Tales—Grimms.
Alice in Wonderland—Carroll.
Peter Pan and Wendy—Barrie.

Nine to Eleven Years.

Girls

Heidi—Spire.
Peeps at Many Lands (Macmillan).

Boys

The Little Lame Prince—Craig.
A Christmas Carol—Dickens.

Eleven to Thirteen Years.

Boys

Age of Fables—Bulfinch.
Treasure Island—Stevenson.
Lad, A Dog—Terhune.
Hans Brinker—Dodge.
Ten Thousand Leagues Under the Sea—Verne.

Girls

Louisa M. Alcott.
Prince and the Pauper—Twain.
Girl Scout Stories.

Thirteen Years to Maturity.

Boys

The Last of the Mohicans—Cooper.
Toilers of the Sea—Hugo.
Two Years Before the Mast—Dana.
American Natural History—Hornaday.

Girls

Lady of the Lake—Scott.
Pride and Prejudice—Jane Austin.

NEW 4-H CLUB SONG BOOK

Music in the Four-H Clubs will be considerably stimulated by the publication of a National Four-H Club Song Book. It was compiled by the National Committee on Four-H Club work and Miss Fannie Buchanan of the Victor Company had a considerable hand in making it a success. She is well known throughout clubdom as the author of the "Dreaming" and "Plowing" songs. In the new publication she has a new one, the "Song of Health." It has already been tried out by some of the club groups and is proving popular. Copies of this song book may be purchased from the C. C. Birchard Company of Boston at 20 cents per copy.

CATTLE ON INCREASE IN MASSACHUSETTS

Cattle increased in numbers in Massachusetts during 1928 according to the records in the office of the Division of Animal Industry. At the beginning of each year the Division, through its representatives in each town, takes a census of cattle and other domestic animals. These records are now all in and are tabulated, and they show that the cattle population of the State has increased from 185,174 at the beginning of 1928 to 192,180 early in 1929. This is an increase of 7,006 cattle. Up to this year there had been yearly a steady loss in total number of cattle, with quite a rapid loss in some counties.

ESSEX FARMER AND HOMEMAKER

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NO. 12

HAROLD A. WILSON, '24

TECHNICAL ASSISTANT, MARKET
GARDEN FIELD STATION AT
WALTHAM

Harold Wilson, whose picture is shown on this page, entered the Essex Agricultural School from Haverhill in 1921. His first year's project, 1922, was spent in Amity, Maine, on the Libbey Farm. He received valuable knowledge of Field Crops on this 125-acre farm. The next project season, 1923, was spent on the Lawrence Farm in Topsfield, where he gained excellent dairy experience with a pure-bred Ayrshire herd.

Wilson's project for his senior year, 1924, was spent at the Market Garden Field Station, then located in Lexington, but now in Waltham. His time was spent in helping to grow the general vegetable crops which might be found on any market-garden farm, experimenting with varieties, plant food requirements, greenhouse crops, etc. He was interested enough in the work to continue at the Station, where he has completed five years of interesting experimental work that has been valuable to market gardeners in the state.

Wilson graduated from Essex Aggie in 1924, with honors, having a part in one of the essays at graduation. He has, by persistent effort, reached his present position of Technical Assistant at the Market Garden Field Station at Waltham.

Harold is married and lives in Lexington. He has one child.

—C. M. Stearns.

Christmas is humanity's annual pilgrimage in search of God. By a sure instinct man goes on his quest for the Highest into that realm where giving, not getting, is the rule. We may deplore the shallow joys of this Holy Day, until we remember that these joys are the poor attempt of our better selves to give rein to our nobler impulses. Christmas is based on history, yes—but it is equally an expression of human nature. To follow its lure is to give our better selves one more chance. The holiday passes, but the better spirit in the souls of men will not pass. The Star that led the three Oriental dreamers over desert sands to Bethlehem still shines and the trinity of pilgrims has become a growing multitude that no man can number.



Harold A. Wilson, Technical Assistant, one of our graduates who is making good at the Market Garden Field Station at Waltham.

CARROT RUST FLY MAGGOT

One of the many experiments in which Graduate Harold Wilson has aided Professor W. D. Whitcomb, entomologist at the Market Garden Field Station, is the work on the control of the carrot rust fly maggot. Part of Wilson's work has been assisting Professor Whitcomb in checking up results of some of his experiments. This past season found that there was an increase in weight of 33 per cent by using mulch paper between the rows of carrots, the seed of which was planted Nov. 2, 1928, May 13, 1929, and June 15, 1929. Where the infestation of the first generation of the carrot rust fly was especially heavy, the paper made a difference between a good crop, mainly by repelling the flies, but undoubtedly stimulating the plant growth considerably. On the second generation of the rust fly, which occurred the last of August, the paper had not been as effective.

—C. M. Stearns.

SENIOR CLASS

The Senior Class will entertain the student body and staff at the Christmas Party to be held December 18. The program includes the play, "Christmas at Finnegan's Flat."

ALUMNI ASSOCIATION ELECTS

ROBERT E. NELSON, PRESIDENT,
HORACE J. SHUTE, SECRETARY-
TREASURER

At the Essex Aggie Alumni Association meeting, held November 26, Robert E. Nelson of Gloucester, Class of 1919, was unanimously elected to serve one year as President of the Association. Horace J. Shute of Newburyport, Class of 1927, was chosen Secretary-Treasurer.

At the banquet about two hundred Alumni were present. Foster of North Andover catered.

The reunion of the Class of 1919 was carried out as planned, with all returning members and their guests, Mr. and Mrs. L. S. Davenport and Miss Mary Nichols seated at a special table appropriately decorated for the occasion. Mr. Gilbert Tucker, President of the Class, and Miss Blanche Burnham were in charge of the reunion.

Members of the 1919 Class present were: Edwin Bergstrom, Robert E. Nelson, Mr. and Mrs. Gilbert Tucker, Blanche Burnham, Mr. and Mrs. Edith (Riggs) Robson, Ernest Bloom, Mr. and Mrs. Roy T. Johanson, Mr. and Mrs. Ralph M. Woodworth, Byron Raymond.

The banquet was immediately followed by the annual dance, which was well attended by alumni, former students and members of the present student body and staff.

Arrangements for the evening were in charge of the retiring officers of the Association: Thomas Wainwright, President, and Robert B. Ewing, Secretary-Treasurer. Credit is due these officers for their good work during the past year.

CREDIT DUE

Credit is due Instructor J. E. Eastwood of the School staff for the efficient manner in which he trained Student Lawrence Westcott, a member of the Dairy Judging Team to represent this State at the National Dairy Show in St. Louis.

Westcott was chosen from a large field of candidates and this student attributed his success to the training he has received at this school during the past year, under Mr. J. E. Eastwood, his instructor in dairying.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

- Dec. 18—Christmas Recess begins.
Dec. 19—Graduation Exercises, Third Evening Poultry Class.
Dec. 31-Jan. 3—Boston Poultry Show.
Jan. 2—School reopens.
Jan. 8-10—Union Agricultural Meeting at Worcester.
March 12—Farmers' and Homemakers' Day.

AGRICULTURAL STUDENTS

The graduating exercises of the Essex Agricultural School, held last week at Danvers, were an occasion full of hope for the future of suburban and rural life in Essex County. The time may come when our thickly settled county will contain little but manufacturing cities and towns, with shore resorts, handsome summer homes and fancy farms in many sightly spots. But congested as our population is, there is still a lot of uncultivated land in our county. Much farming used to be done in this county, and as agriculture becomes more scientific, still more will be done here. It was interesting to read the story of the prize winners at the Agricultural School, and how they had made good by success in various forms of farm and garden work. The school turned out 21 graduates in its agricultural department the past year, and all these young people should be able to take up farm or garden or poultry work in our county and make good at it.

The attention of the boys and girls of Essex County should be called to the advantages of this training. They get at this school an excellent practical preparation for life in an occupation that supplies the most basic human needs. No reverses in the stock market ever affect very much the demand for food. People are always going to want eggs and chickens and milk and vegetables and fruits, under all conditions of good and bad business. Furthermore, they should note that many people are coming back from the west, where land prices were inflated beyond all reason a few years ago, and are still high as compared with Massachusetts land, and they are buying farms in this state. The chances are strong, if they can learn the fundamentals of some form of farm work, and then obtain the ownership of an Essex County farm or garden property, that the real estate will be worth much more in ten years. If during that period they can improve that property by scientific farm and garden work, they ought to make a handsome profit through appreciation of the land, and while waiting for that appreciation, they should earn a comfortable living.—From the Salem Evening News, December 3.

ALUMNI NOTES

RICHARD V. ASHTON, '25, is an insurance salesman with headquarters in Salem. He has visited the office recently and told us that he is living at 236 Lafayette Street.

I. ALFRED BRYER, '22, has been working with the Kresge Stores in Connecticut.

WALLACE C. CORNER, '28, has been working for Bradford Burnham, a graduate of the first class, in his greenhouses in Essex.

GEORGE E. GARLAND, '22, is a traveling salesman for the Economy Fuse Manufacturing Company.

HAROLD W. HOLDEN, '22, former cow tester in this county, is testing milk for a large bottling concern in Bedford.

OLIVER E. HOLMES, '24, and Miss Edith M. Atkin, of Readville, were married on September 14th. They are living in Preston, Cuba.

RUSSELL W. KNIGHT, '22, is salesman for Chamberlin & Burnham.

GUY D. PHILPOT, '24, is payroll clerk at the Salem Electric Lighting Co., and studying evenings at the Bentley School of Accounting in Boston.

ELMER C. W. SHATTUCK, '24, is working for the B. R. Waldron & Sons Creameries in Califon, New Jersey.

A. DONALD VAUGHAN, '26, is doing cow testing work for the Pomfret Jersey Breeders' Association in North Pomfret, Vt.

GRADUATION

The Class of 1929 held their graduation exercises at the Peabody Institute, Danvers, on Tuesday, November 26. The exercises consisted of selections by the School Orchestra and Glee Club, and essays by Robert L. Moulton of Lynnfield Center, Edna Bamford of Middleton, and Enaise St. John of Danvers. Grace Torsen of Lynn rendered vocal solos.

An interesting part of the program was the awarding of the annual prizes by Director Smith. The results were as follows:

BAUER PRIZE WINNERS *Agriculture*

1. Robert L. Moulton, Lynnfield Center.
2. Harry E. Nelson, Saugus.
3. Eino Sormunen, Peabody.
4. Earle Blake, Peabody.
5. Robert Ellis, Lexington.

Homemaking

1. Viola Messer, Methuen.
2. Ida M. Monsell, Amesbury.
3. Miriam E. Hilton, Danvers.
4. Ruth K. Curtis, Boxford.
5. Dorothy B. Wilson, Swampscott.

ENDICOTT PRIZE WINNERS

1. Clifford R. Bryer, Saugus.
2. Richard L. Heider, North Andover.
3. Arthur K. Gordon, Rowley.
4. Herbert H. Kirk, Amesbury.
5. Ida M. Perkins, Haverhill.

ALUMNI PRIZE WINNERS

Agriculture

J. Arthur Henderson, Andover.

Homemaking

Dorothy H. Pingree, Danvers.

KRASKER MEDALS

Agriculture

Maynard R. Haley, Rowley.

Homemaking

Grace V. Torsen, Lynn.

The graduates were presented their diplomas by Mayor R. S. Bauer, President of the Board of Trustees.

The address to the graduates was made by Charles H. Eglee of Brookline.

FRED C. MORRIS, '22, writes that he is working on the Walker Estate in Manchester. He is married and has one daughter. He would be glad to hear from other Essex people at the above address.

GLADYS M. HILBERT, '27, is assistant dietitian at the Tewksbury Hospital in Tewksbury.

ELIZABETH HUTCHINSON, '27, after a very successful tearoom season this summer, is working in the new tearoom which Jordan Marsh Company recently opened.

JOHN J. SULLIVAN, '24, graduated from the two-year course at M. A. C. with honors this past June, and is now working on the Wildacres Farm in East Greenwich, Rhode Island.

PHILIP ARMITAGE, '27, has taken over a florist's store in Lynn.

—G. H. Wright.

WORCESTER AGRICULTURAL MEETINGS, JANUARY 8, 9 AND 10

More than 2,000 farmers in Massachusetts have been asked to mark down the dates of the Union Agricultural Meetings in Worcester, January 8, 9 and 10, and to be present at as many of the three-day sessions as possible. With the addition of the Massachusetts Roadside Stand Association to the number of organizations which hold meetings at this time, there are just thirty associations co-operating in these meetings. Most of them will confine their sessions to one day, but the State Fruit Growers' Association will take all three days. With them, and with a few other groups, the meetings in Worcester are practically New England wide in character, as they attract farmers in various lines from all the New England states.

The first day meetings include sessions of the Roadside Stand Association, the newest group to join with the others in this annual gathering of the farm forces of the state. Other meetings on the first day will be the moth superintendents, sheep growers, and poultry raisers.

Women will have their innings on the second day, when the state home economics association will hold an all-day session at the woman's club house near the state armory, where general meetings will take place and where the big trade exhibit will be held. The fruit growers will continue their sessions and the milk inspectors will have their annual get-together for a discussion of their problems. Other meetings on the second day will be those of the tree wardens and foresters, the co-operative dairy council, the veterinarians' association and the state vegetable growers' association. On the evening of the second day the annual agricultural banquet will be held at the Hotel Bancroft.

The dairy interests will have their meetings on the third day, with morning sessions of the state associations of Jersey breeders and Holstein breeders, the state dairymen's association and the council of the tested herd owners' associations. Other groups to meet are the home canners' association and the continued meetings of the fruit growers.

Aside from these regular meetings the Massachusetts Agricultural College will keep open house at their eastonary stand in the exhibition hall and will show what the college has to offer to rural residents of the state. The state agricultural schools will make a similar demonstration of the value of their work as in the past. All these meetings are free and open to everyone who cares to attend. Full copies of the program, including

all the thirty associations, will be mailed on request to the State Department of Agriculture, State House, Boston,—Mass. Dept. of Agriculture.

M. A. C. FORUM ON WEZ—WEZA

MONDAYS AT 6:15 P. M.

- Jan. 6—The Farmer's Pork Barrel.
V. A. Rice.
- Jan. 13—The County Agent; Who He Is and What He Does.
S. R. Parker.
- Jan. 20—Poultry Management.
J. C. Graham.
- Jan. 27—Live Stock Prospects.
J. H. Frandsen.

NOTES ON ASPARAGUS

Dry Weather — Insufficient water during the past summer has had a detrimental effect on asparagus fields located on the lighter soils. The dry season was especially destructive to fields that were not thoroughly weeded. Weeds, in most cases, are shallow rooted, and in 1929 were especially destructive because of the large amount of water they removed from the surface soil where the fertilizer was supplied. The result is that many grovers grew weeds with their fertilizer and the asparagus was materially starved. Also, beds cut late in the season made a poor growth because of lack of water. The prospects for high quality in 1930 are not favorable. An unusual proportion of small spears will probably be cut and many fields will be condemned as unprofitable. Growers may attribute low yields and small grass to causes other than weediness.

Asparagus beds on the heavier soils fared much better. In fact, the writer has never observed such good growth of asparagus as occurred on well cared for beds on the heavier soils this past season.

Rust—Considerable rust, even on the Mary Washington, was found this year, and unless the tops are carefully removed and burned there will be much more another year. Rust, like other diseases, has a way of appearing in cycles, probably due to weather conditions. Apparently, the past season has been favorable for the reappearance of the rust fungus. This is the first year that rust has been plentiful on the Mary Washington, which indicates that the variety has not been selected sufficiently for rust resistance. Growers can prevent the rust from developing, to a large extent, by burning the tops after they become dry, if rust is present.—From the *Market Garden Field Station Journal*.

4-H CLUB LEADERS' MEETING

The local leaders of 4-H Club Work in Essex County met at the School on Saturday, November 16, with County Club Agent Horace J. Shute. About forty local leaders, representing forty-three different clubs, attended. Three state leaders were present and took part in the program. Former Club Agent R. B. Ewing was present and took charge of the recreation period.

Silas Little, Jr., of Newbury, reported on the National 4-H Club Camp held at Washington, D. C., to which he was a delegate. Miss Viola Messer of Methuen reported on her trip to Camp Gilbert.

As a result of the discussion led by Miss Myra Smith, "What About a Local Leaders' Organization," an organization was formed with Mr. Silas Little, Sr., chairman; Mrs. A. J. Usher, vice-chairman; Mrs. Leon Jordan, secretary; and Mr. Charles Nason, treasurer. To assist this Executive Committee an Advisory Council of nine was appointed. This organization was formed primarily to assist the Club Agent and to have the leaders feel that they were a body of workers rather than of individuals.

4-H Club songs, illustrated by film strips, added to the conference program. Luncheon was served by the School.

—H. J. Shute,
County Club Leader.

GREEN AND WHITE

At a meeting of the Seniors on December 5, the following members of the 1930 Class were elected to the Editorial Board of the Green and White.

Editor-in Chief—Ida May Perkins of Haverhill.

Assistant Editor—Helen Budd of Methuen.

Business Manager—Warren Shiers of Andover.

Assistant Business Manager—Mary Callan of Peabody.

Alumni Editors—Herbert Henderson of Andover, Margaret Gordon of Methuen.

Athletic Editors—Lester Knowlton of Hathorne, Miriam John of Peabody.

Exchange Editors—Roland Daggett of Rockport, Dorothy Rogers of Byfield.

Joke Editors—Richard Saunders of Gloucester, Alice Dalton of Lawrence.

Art Editors—Herbert Kirk of Salisbury, Barbara Willard of Beverly.

Senior Class Editors—Earle Blake of Peabody, Eleanor McGlew of Newburyport.

Health lies in labor and there is no royal road to it except through toil.—Wendell Phillips.

JUST KITCHENS

ESSEX COUNTY WOMEN MAKING
PLANS TO GLORIFY THEIR
KITCHENS

Now that we have started our Extension family in good food habits, we are going to spend some time making the laboratories in which these delicious foods are to be prepared more convenient and more attractive.

Are you *interested* in your kitchen? Chesterton says there are no uninteresting things. There are only uninteresting people. Ordinarily we do not link pots and pans with the thought of beauty and romance. Yet, isn't it our own fault if we may not

Some say, "But I want to get out of the kitchen." So say all. But why not spend a little thought in making our kitchens convenient and step-saving, so that we will be able to do our work in much less time and so *get out* of the kitchen.

"But I do not own my own home," others say. But you do own your pots, pans and kettles, knives, forks and spoons. Are they within easy reach? Have you accumulated unnecessary tools? Are your tools sharp? These are some of the questions we aim to discuss in our county-wide Better Kitchens movement, which starts in February.

Mrs. Haynes, our State Home Management Specialist, has given Essex County dates in February, March, April and May. She will conduct a series of meetings under leaders in one section of the county, while the Home Demonstration Agent will carry groups in other sections. We plan to enroll 300 women in this Better Kitchens movement.

If you would like to make a study of your kitchen, send your name to your Town Chairman and help her form a study group.

"Come on on! Come on! We want you all to see.

Come on! Come on! How free from tire you'll be,

If only you will fix your tools so handy they will be

When you are doing your house-work."

ANNUAL REPORT OF HOME
DEMONSTRATION AGENT

Another year of Home Economics Extension work has been completed.

The figures below show the growth of work during the years 1927 to 1929. Much of this growth is due to the fine co-operation given by the women of the County Home Economics Extension Committee, organized in 1928, by the Community Extension Committees, and by the Project Leaders.

In actual figures, 143 women have been actively engaged in forwarding the Extension program during 1929.



Notice the arrangement of small kitchen equipment and convenient working surfaces.
(Courtesy of U. S. D. A.)

Through their efforts different Extension projects have been conducted in all but six towns in the county. Is your town one of the six? If so, we hope the women of your community will become members of the Extension family during 1930.

The figures given below were compiled from the annual reports and we hope they will prove of interest to you.

The Home Demonstration Agent wishes all homemakers of Essex County a Happy and Healthy New Year.

"He who has health has hope, and he who has hope has everything."

COMPARATIVE CHART OF WORK
ACCOMPLISHED

	1927	1928	1929
Membership	746	1214	1453
Total attendance at meetings	2205	3250	4960
Number of different women	398	762	905
Total telephone calls and all letters	1866	3705	4232
Number of project leaders	42	85	115
Nutrition groups	13	5	34
Clothing groups	12	30	19
Home Management groups	4	20	21
Number of groups	69	85	101

Marion P. Craeford,
Home Demonstration Agent.

THE CHRISTMAS SPIRIT

If you feel a bit more kindly toward the folk you love the best,
If your heart's a bit more tender with compassion for the rest,
If the getting does not matter and you've given all you can,
Then, you've caught the Christmas spirit and you're every inch a man.
—J. W. Laird.

PREVENT THAT COLD!

PREPARED BY MAY E. FOLEY,
EXTENSION NUTRITIONIST

The prevalence of common colds during the fall and winter months may be due to a poor diet. An undernourished child or adult is less able to resist infection than one who is in good physical condition. And the fat person may be under nourished!

One means of preventing colds lies in building up the body resistance by eating foods rich in vitamins. Among these are milk, butter, cheese, eggs, vegetables, fruits, and cod-liver oil. Some people eat entirely too many sweets and starches, and so do not have appetite for the other foods. Sweets and starches are good energy foods but they contain no vitamins or minerals. Water is too often taken in entirely too small quantities in the cold weather. Four to eight cups daily should be used by every child and adult. It helps carry off the waste from the body and so prevents congestion, always present with colds.

Other health habits should be followed. Fresh air, sunshine, rest and sleep are important in building up body resistance. The sunshine in the middle of the day is much more beneficial than at any other time.

If one member of the family has acquired a cold, the greatest care should be taken to prevent other members from getting it. A separate drinking glass and towel should be used by the affected person, and he should sleep alone in a room with plenty of air. All dishes should be well washed with soap and plenty of boiling water used in scalding. Children should be taught to cover the mouth when coughing or sneezing.

ESSEX FARMER AND HOMEMAKER

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VOL. 11

HAITHORNE, MASS., JANUARY, 1930

NO. 1

F. MAYNARD TUCKER, ESSEX AGGIE 1920, AWARDED "CERTIFICATE OF MERIT" BY STATE BOARD OF AGRICULTURE



F. MAYNARD TUCKER
Essex Aggie 1920

Editor's Note—At the banquet held in connection with the Union Agricultural Meetings at Worcester on January 9th, two Essex Aggie graduates, whose pictures appear on this page, were honored for outstanding accomplishments in agriculture and home economics. The following articles were taken from a booklet prepared by the Department of Agriculture.

In 1920, when F. Maynard Tucker graduated from Essex Aggie, he had definitely settled in his own mind that market gardening was the line of agriculture which offered the greatest possibilities to him. The demand for fresh, locally-grown vegetables was then becoming more and more acute in his home city of Gloucester. Tucker believed in the possibilities of Cape Ann for successful market gardening because of the fine market opportunities. Having already had several years of pleasant associations with Mr. E. H. Bickford, the well-known wholesaler and retailer, who grew some produce as well, it was but natural that the two men should merge their interests, and the resulting arrangement was that Tucker should be responsible for the production of crops and Mr. Bickford spend his time on

the selling end. Nine years of this arrangement has just ended with the death of Mr. Bickford. Mr. Tucker will carry on for his own interests hereafter. Much of the success of this arrangement has been due to Tucker's careful check-up on cost accounting of his various crops. He can tell you how much it has cost him to grow a crop of lettuce or an acre of potatoes, at any time. He can tell you whether dusting potatoes for blight is profitable or not, and whether top-dressing celery is profitable or not.

Ten to twelve acres of land have been devoted to growing vegetables very intensively to such crops as lettuce, spinach, beets, carrots, celery, cabbage, tomatoes, potatoes, etc. He has practiced inter-cropping and succession-cropping to the utmost.

The winter of 1927-28 Maynard became interested in buying some land of his own, which he could fall back on after he had gotten things started in good shape. After spending some time in looking around the eastern part of Essex County and in many sections, he decided on a farm of about ten acres in Ipswich, right on the main highway, looking toward the possibility of marketing the produce right at his own roadside stand. Maynard persuaded his brother to join him and placed him as foreman on this newly purchased farm. Because his brother knew nothing of agriculture this meant double work for Maynard, planning and keeping things running smoothly at both ends. Nevertheless, at the end of the second season Maynard and his brother have established a very reputable business at their roadside stand in Ipswich.

With these two farms of about 15 acres each, Maynard still finds time to attend the meeting of the Boston Market Gardeners' Association, of which he is a member, and other meetings where he might learn something which will help him in his business. Maynard believes in weighing things out or reasoning carefully before putting into practice some new cultural method or procedure. Although very quiet in his actions, he is up and coming, always on the job, ready to learn and ready to tell of his experiences. He is progressive and a true citizen of Essex County as well as a loyal graduate of Essex Aggie.

VIOLA MESSER, 1929, AWARDED "SILVER MEDAL" FOR LEADERSHIP IN 4-H CLUB WORK

Ability to teach others how to can, as well as knowing how herself, is the big reason why Miss Viola Messer, of Methuen, receives this recognition and award. There are a lot of 18-year-old girls in the state who know how to can fruit and vegetables, but there are few who have such an outstanding record of teaching others. Years hence, long after she has been out of club work, what she has done will be reflected in better living in hundreds of homes.

Seven years ago a 4-H Clothing Club was organized in the Marsh Corners School in Methuen. It was the first 4-H Club ever organized in that community and there were six members. The other five got what they could out of the club and dropped out as they got older. Viola got what she could out of the club and kept right on, passing out to others what she had learned. It was not easy, but she kept at it all through her school career, except for two years in high school, when the studying took so much time that she had to give up club work.

In the fall of 1926, she entered the Essex County Agricultural School and again took up club work as an active leader as well as a member. She is

(Continued on page 4)



VIOLA MESSER
Essex Aggie 1929
Homemaking Department

FARMERS' DAY
MARCH 12

Essex Farmer and Homemaker

HATHORNE, MASS.

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CALENDAR

Feb. 19—Chebacco Pomona Grange at
Hathorne.
Feb. 24-28—Recess. Homemaking De-
partment.
March 12—Farmers' and Homemakers'
Day.

EDITORIAL

Students of the Agricultural Depart-
ment of the School produced during
the year 1929 a total of over \$75,000
of agricultural products and labor, ac-
cording to a recent announcement of
the Education Manager. This total is
more than \$11,000 more than for the
season of 1928. The distribution of
this total is as follows:

Ownership projects, gross receipts,
\$18,873.32.

Employed projects, paid labor,
\$48,906.23.

Other supervised, unpaid work,
\$7,783.47.

The ownership projects involved an
outlay for stocks and supplies of
\$9,504.28, and labor charges of
\$4,997.81. The list of projects this
year shows that students cared for
more than 15 acres of ownership vege-
table gardens, nearly 5,000 hens and
chicks of their own, 34 colonies of bees
and smaller numbers of cows and
small animals. Other projects were
conducted in Fruit, Floriculture, For-
estry, and Roadside Marketing.

As usual, the majority of the stu-
dents were on employed projects, since
most do not have an opportunity to
carry on the ownership type of work
at home.

The adult poultry class unit again
shows a gross of almost \$30,000 worth
of poultry products produced on their
projects during the year.

Student help is largely used, too, in

running the farm, both in class time
and in morning and evening chores, as
well as throughout the summer, and
the gross value of the farm products
annually is well over \$20,000.00.

Figures cannot tell the whole story
of the School's usefulness to the citi-
zens of Essex County through its Ex-
tension Service, Unit Courses for
Adults, and its resident instruction in
Agriculture and Homemaking for
young people, but nevertheless, since
it costs money to carry on the work
the taxpayers are entitled to know
what the immediate results are, as far
as they can be measured. The results
indicate that each year those who are
benefiting by this institution's oppor-
tunities are returning to the county
in the form of agricultural products
raised or labor invested, values far in
excess of the annual net cost to the
people of Essex County.

VARSITY BASKETBALL

Jan. 3—Alumni
Jan. 8—Golden Rule
Jan. 10—At St. Joseph's Juniorate
Jan. 15—Open
Jan. 17—At Manchester
Jan. 22—At Salem Normal
Jan. 24—Norfolk (Junior Prom.)
Jan. 29—Manchester
Feb. 1—At Bristol
Feb. 5—At Dummer Academy
Feb. 7—Open
Feb. 12—Salem Normal
Feb. 14—Open
Feb. 19—Bristol
Feb. 21—At Norfolk
Feb. 24—At Beverly
Feb. 28—Haverhill Continuation
Coach—Philip H. Coubig
Captain—Jack Sturtevant
Manager—Bradford Webb

On January 31, a joint assembly
will be held, at which time Carl
Schrader, State Supervisor of Physical
Education, will be the speaker.

SCHOOL NOTES

A joint assembly was held on Janu-
ary 14, at which time Mr. James
Edward Peabody, formerly of the
Morris High School, New York, gave
an instructive talk on the mosquito
and the conquest of yellow fever. Mr.
Peabody told in an interesting manner
the necessity for mosquito control in
this state.

The Annual Junior Prom was held
on Friday, January 24. A basketball
game with the Norfolk County Agri-
cultural School preceded the dance.

February 21 has been selected as
the date of the Senior dance.

The Sophomore class will be hosts
to the staff and student body on the
afternoon of February 14. A short en-
ertainment followed by dancing is
planned.

Rev. Ralph A. Sherwood of Salem
gave an inspiring address to the stu-
dent body at a joint assembly on
January 2.

The January issue of the Boston
University School of Education Bulle-
tin for the second semester courses
has just been received. From it we
learn that Mr. Roberts, former teacher
in this School, is giving a course of
Civic Education Conferences, and that
Mr. Abraham Krasker, former teacher
and donor of the Krasker Medals for
Excellence in English, is teaching a
course in Visual Education.

GIRLS' BASKETBALL

Jan. 14—Methuen
Jan. 22—Manchester
Jan. 29—At Manchester
Jan. 31—Beverly
Feb. 6—Peabody
Feb. 10—At Methuen
Mar. 4—At Peabody
Mar. 11—At Beverly
Coach—Ida May Perkins
Faculty Mgr.—Verna L. Clarke
Manager—Eleanor McGlew

SUMMARY OF WEATHER OBSERVATIONS

OCTOBER-DECEMBER INCLUSIVE, 1929

	October	November	December
Maximum temperature	77 (20th)	75 (2nd)	49 (14th)
Minimum temperature	25 (11th)	10 (30th)	—3 (12th)
Average Daily temperature	50.4	41.4	27.7
Greatest Daily range	40° (19th)	28° (10th)	27° (1st, 12th)
Least Daily range	4° (17th)	6° (4th)	2° (18th)
Precipitation	2.45"	2.73"	4.00"
Five-year average	3.30"	3.05"	3.85"
Variation	—, 85"	—, 32"	+15"
Average Relative Humidity, 8 a. m.	68.9%	79.4%	83.0%
No. of days on which rain fell	9	11	13
No. of clear days	14	11	8
Partly cloudy days	10	8	10
Cloudy days	7	11	13
Hours sunshine	196	141	110
Per cent sunshine	57.5%	48.1%	39.0%

—H. A. MOSTROM.

DOES MILKING THREE TIMES DAILY PAY?

Many dairymen have asked this question. The Government Experiment Station at Beltsville, Maryland, recently published some results showing that with cows of good production there was an increase of 24 per cent in milk over twice a day milking. For a cow giving twenty quarts daily, twice a day milking, this three times a day milking would give approximately twenty-four or twenty-five quarts a day. The extra five quarts would cost extra. Each dairyman must determine for himself how much extra labor and grain it will take.

Probably any cow giving twenty quarts daily on twice a day milking would show a profit by milking three times a day.

—F. C. Smith.

VALUE OF MAN POWER

Some rail at American farmers because they do not get the production per acre. But consider the fact that the American farm worker uses 2.05 horses and produces \$292 worth of agricultural products. England comes next with .88 horse per worker and \$126 worth; Germany, .55 horse and \$90 worth.—U. S. D. A. Report.

28 MINUTES PER COW

A study of the cost of milk production on 48 Wisconsin farms, made by the Bureau of Agricultural Economics, United States Department of Agriculture and the University of Wisconsin, showed that the amount of man labor average 171 hours per cow annually, or 28 minutes a day. This labor included milking, feeding, caring for utensils, and cleaning the barn, but not hauling manure from the barn, delivering milk, or caring for young stock. Some farmers spent as little as 20 minutes a day per cow, and others as much as 45 minutes.

POULTRY DEMONSTRATION

Two members of Mr. Moore's Advanced Poultry Class, Alexander Swinarski and Aarne Kolhonen, put on a demonstration at the Boston Poultry Show, explaining the value and use of the Massachusetts Special Egg Carton. This demonstration showed how to candle, grade and weigh market eggs, and explained the necessity of these operations.

Poultrymen of New England must do these things in order to compete successfully with poultry products shipped in from other parts of the country. Demonstrations of a similar nature were given by students from other Agricultural schools and departments, as well as by 4-H Club members.

The judges announced the winners

on the last day of the Poultry Show, and the team from this School received the first prize ribbon.

This demonstration was repeated at the Union Agricultural meeting held in Worcester on January 9.

—W. B. Moore.

FRUIT DEMONSTRATION

Ernest Blancy, a member of the fruit-judging team and a senior at this School, gave a talk and demonstration on fruit diseases and insects at the Worcester Union Agricultural Meetings. He exhibited charts and a number of specimens which he had collected during the past summer while on project. These demonstrations are of educational value to the students participating in them, while at the same time they illustrate the type of work which is carried on in vocational agricultural schools.

—C. M. Wood.

B. M. G. A. MEETING

A meeting of the Boston Market Gardeners' Association was held at the School on Saturday, January 18.

Despite the bad weather a large audience gathered to hear Mrs. Edith L. Fullerton, Director of Agriculture for the Long Island Railroad Company of New York. Her topic was, "Market Gardening on Long Island."

There were nine exhibitors in the carrot contest. L. E. Ellsworth of Southboro won first place and Henry Tipert of Danvers, second.

WEATHER SUMMARY FOR 1929

Maximum Temperature for year	95° July 28, Sept. 8
Minimum Temperature for year	-3° Jan. 16, Dec. 3
Average Daily Temp.—1929	48.05°
Average Daily Temp.—1928	47.9°
Total Precipitation—1929	38.00"
Total Precipitation—1928	42.28"
Five-year average	37.75"
Boston normal rainfall	40.14"
Snowfall—1929	57"
Snowfall—1928	27"
Aver. Relative Humidity, 8 a. m.	75.5%
Aver. Relative Humidity, 1928	73.6%
Rain fell on (1929)	132 days
Rain fell on (1928)	130 days
No. clear days	156 (1928, 160)
Partly cloudy	114 (1928, 92)
Cloudy	95 (1928, 114)
Total hours sunshine	2527 (1928, 2469)
Per cent sunshine	55.7% (1928, 55.3%)
Last frost	June 3rd
First frost	October 6th

Six consecutive months, June to November, inclusive, showed a deficiency in rainfall. This accounts for the dryness of the year, though the total figures are close to normal and actually above the five-year average 1924-1928.

H. A. MOSTROM.

ESSEX STUDENTS AGAIN WINNERS IN FRUIT JUDGING

At the annual mid-winter fruit-judging contest, held in Worcester on January 10 in connection with the Union Agricultural School, Roger Peabody, of Foxford, well merited first prize by scoring one hundred points more than his nearest competitor. Ernest Blancy, of Saugus, secured third prize. Twenty-four students, representing agricultural schools and agricultural departments throughout the state, participated in this contest. The Essex students were the only ones to win two prizes for their school.

This contest culminated a remarkable year in fruit judging at the Essex County Agricultural School. At each of the four annual contests a student of this School has secured highest honors: a different student secured first prize each time. At the High School Day contest held in Amherst last May, Arthur Gordon of Rowley, class of 1929, set a precedent by securing a perfect score which won for him a silver cup presented by the Massachusetts Agricultural College. The School team placed third. At the Topsfield Fair contest in September, Ernest Blancy of Saugus secured first prize, consisting of five dollars in cash presented by the Topsfield Fair Association, and the team placed first. At the Brockton Fair Four-H Club contest in October, which was on an individual basis, Bradford Webb of Andover secured first prize, consisting of a sixty-dollar scholarship to be used for further agricultural education.

Fruit-judging occupies an important place in our fruit-growing courses. A knowledge of varieties and their characteristics, as well as the blemishes and the insects and diseases which cause the blemishes on the fruits, is gleaned from a study of fruit judging. Every fruit grower should know first of all the varieties to plant, he should know the cause of the blemishes on his fruits in order to know what control measure to apply. The grower must also know varieties and blemishes in order to pack apples according to the Massachusetts Apple Grading Law. A knowledge of fruit judging also aids in securing the prize-winning plates at the fairs and fruit shows. Fruit judging is always enjoyable and highly instructive to the students, and particularly to those who gain proficiency enough to represent the School in the annual contests.

CHILDREN'S CLOTHING PROJECT

Many mothers of young children have asked for help in selecting and constructing clothing suited to the best development of the one-to-six year old child.

The Essex County Extension Department is now offering a course in children's clothing which includes a study of problems involving the making of garments which combine common sense, health, economy, charm, and individuality.

This course consists of three two-lesson units. Individuals may enroll for one, combination of two, or for all three units. Two garments illustrating points stressed are made in each unit. The three units are I. Little Girls' Clothing; II. Boys' Suits; III. Children's Coats and Hats.

Some of the points stressed are: construction of simple romper or coverall, decorative finishes for cotton goods, fastenings, underwear, pockets, plackets and cuffs, construction of blouses and shirts, trousers, play suits, party dresses, coats, caps, hats, selection of ready-mades, care and renovation.

A summary meeting may be included in this project, at which garments made are exhibited and a special program of interest to mothers of small children arranged.

If you are interested in the course your community chairman will be glad to give you further information, or you may write to Marion P. Crawford, your County Home Demonstration Agent, Hathorne, Massachusetts.

A MESSAGE TO MOTHERS

A nutrition letter for mothers of pre-school children is being sent out this month to over 600 mothers whose names have been sent in by the Community Chairmen. This is one of four letters to be prepared by Miss May E. Foley, the State Nutrition Specialist.

We know that this service will be appreciated by the many mothers who cannot attend the regular meetings conducted by the Extension Department.

We will be glad to send this letter to other mothers of young children upon request.

JANUARY NOTES

January finds the Extension Department completing the vegetable preparation project in sixteen communities, continuing Clothing Selection and Child Development, and launching Children's Clothing and the Homelike Living Room projects.

4-H CLUB PLOUGHING SONG

A growing day, and a waking field,
And a furrow straight and long.
A golden day, and a lifting breeze,
And we follow with a song.
A guiding thought, and a skillful hand,
And a plant's young leaf unfurled.
A summer's sun, and a summer's rain,
And we harvest for the world.

Chorus

Sons of the soil are we,
Lads of the field and flock;
Turning our sods, asking no odds;
Where is a life so free?
Sons of the soil are we,
Men of the coming years,
Facing the dawn, brain ruling brawn,
Lords of our lands we'll be.

(Home Publishing Co., Grinnell, Iowa)

(Continued from page 1)

now a student at Framingham Normal School, taking a course in home economics which will fit her for continued leadership as a vocation. Her first experience in club leadership was in her home community, the Marsh Corners School, where she had a lunch box club of 16 girls and boys who prepared their own lunches over a Sterno heater, purchased co-operatively.

The following summer she organized a canning club of 15 members. They met each week, and the girls were so enthusiastic that the mothers came in also to learn some of the up-to-date methods in canning. The club put up over 1,000 jars that summer, and in the county fair won \$27.50 in prize money because of the excellence of their work. In recognition of her work she was made county canning champion and she was awarded the Bauer sweepstakes prize at the Agricultural School for having the best project.

A fine piece of Americanization work next came her way, and she accepted it. She organized the Beta-cook Club of girls, mostly of foreign parentage. She taught them to make good American dishes so effectively that in many of the homes they practically supplanted the old-world dishes which had been a matter of habit for years. The eagerness with which these American dishes were received was a good proof of the value of the project, also of the wise teaching of the girl leader. The club was the outstanding food club of the state last year.

Throughout last summer she not only led another canning club at Marsh Corners, but accepted a position as canning club leader in the city of Haverhill. She had 12 different clubs with a total enrollment of nearly 400. She met two clubs each day, with an average attendance of 20 to 30 in each group. Each club held its business meeting and had its games, usually while the jars were processing.

YOU CAN LEAD HIM TO WATER—

Granting the necessity for teaching cleanliness to children, what shall we teach them?

First of all, in the case of most parents at least, they want children to look clean—to keep their faces, hands and clothes clean—to look presentable, so they will not be ashamed to have other adults see them. A child's teeth may be uncleaned, his methods of handling food fraught with danger to the whole family as well as himself, but so long as he makes a good appearance, so long as there is no visible dirt to offend the eye, many a parent is satisfied. General body cleanliness, in such cases, may be a matter of little concern to the parents, an attitude which soon affects the children.

Thoughtful parents, however, are interested in a second phase of cleanliness—a phase important because of its hygienic relations. This second phase includes such habits as cleanly ways of handling food for one's self and others, taking the necessary precautions in sneezing and coughing, learning to keep the fingers away from the eyes, nose and mouth, washing the hands thoroughly after cleaning the teeth, leaving the toilet, handling soiled clothing and pet animals.

Children are not born with a "sanitary sense." Many, unfortunately, reach adult age without acquiring its semblance. But cleanliness is both its aim and its essence, and parents should help the child to develop it. Sanitary habits, however, are difficult to inculcate, because the eye, unfortunately, is not an accurate judge of the sanitary character of an object or surface.—*Cleanliness Journal*.

HONORS LETTER

A new letter, to be designated as the HONORS "E" has been awarded to students and graduates who have earned six or more points in extra curriculum activities during the last year. The letter is of old English design, and is made up of white on a green background, thus incorporating the school colors.

The purpose of the HONORS "E" is to reward those students who have accomplished most in the extra curriculum activities of the school. The students who received the coveted letter are: Clifford R. Bryer, Annie M. Dickinson, Maynard Haley, Robert Moulton, Ida May Perkins, Henry Roberts, Warren Shiers, Raymond Turner, Bradford Webb, and Robert Winkley.

These 12 clubs put up more than 3,000 jars. In spite of having 13 canning clubs on her hands, she did her own canning at home in the evenings.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 11

HATHORNE, MASS., FEBRUARY, 1930

NO. 2

Farmers' and Homemakers' Day Wednesday, March 12

Over 1200 farmers and homemakers plan to attend the Sixteenth Annual Farmers' and Homemakers' Day at the Essex County Agricultural School, Hathorne, Massachusetts on March 12, 1930.

The big day will begin at 10.30 a. m. with an address by Dr. James D. Brew of Cornell, on the subject of "Quality Milk for the Consumer." A milk-tasting contest will be conducted to find out whether people on the average can detect raw from pasteurized milk.

Following Doctor Brew, the plans of the Massachusetts Bay Tercentenary Committee will be discussed by Joseph E. Warner, Attorney General of Massachusetts.

After noon there will be special sections for various types of farmers. The largest meeting will probably consist of the poultrymen. At 1.30 p. m. Homer Rowell, President of the newly organized Essex County Poultry Association will introduce Professor James E. Rice of Cornell, former President of the World's Poultry Congress. He will discuss "Selections for Production by Physical Examination," using charts, etc.

How to produce milk that will be clean, free from odors, low in bacteria, etc., will be discussed by Doctor Brew before the dairymen. Professor Frandsen of Massachusetts Agricultural College will use charts to show which electric refrigeration unit gave best results.

WOMEN TO SEE DEMONSTRATIONS

The women will meet in the Homemaking Building where lectures, demonstrations on milk and other foods will be given by Miss May E. Foley, Extension Specialist of Massachusetts Agricultural College. Students of the Homemaking Department will show exhibits of work done in the various classes.

Professor A. E. Wilkinson, Specialist from Connecticut, will discuss "Can the Local Gardener Meet Southern and Western Competition." Ray M. Koon of the Market Garden Field Station, Waltham, will discuss sash houses, using slides. Messrs. Guba and Whitcomb, also of the Field Station, will discuss pest control.



Plant House of William Foss, Rowley. He is standing in doorway. Maynard Haley, graduate of this School at the right. This is the "\$35 cash outlay house" referred to in article.

The results of the 90% Cl an Apple Club will be presented by Professor W. H. Thies of Massachusetts Agricultural College and others in the fruit section. The latest in pest control will be handled by Messrs. Guba and Whitcomb in this section.

DOCTOR CRAIG FOR FLORISTS

Florists will have an excellent chance to meet W. H. Craig, Weymouth florist, in an illustrated lecture on the subject "Management of Old Gardens."

Tradesmen will be present with exhibits of insecticides, feeds, spray machinery, poultry materials, paints, and other supplies of interest to farmers and their wives. In addition, the various instructors at the School will have educational exhibits of interest to all.

Quick lunches will be served by a caterer in the Main Building of the School.

—F. C. Smith.

M. A. C. Forum on WBZ-WBZA Mondays at 6:15 P. M.

- Feb. 24—How to Make a Seed and Plant Order, D. E. Ross.
- March 3—Spray Programs, W. H. Thies.
- March 10—Better Pastures, C. H. Parsons.
- March 17—Early Work on the Lawn, L. S. Dickinson.
- March 24—The Home-made Plant House, R. M. Koon.
- March 31—Garden Plans and Plants, C. L. Thayer.

Build A Plant House

There is just time enough to build that little sash-covered plant house you wish for every time you face the ordeal of getting the hotbeds ready.

Recently a grower and a neighbor took the set of plans furnished by the County Agent and put up the frame for a 10 x 30 footer in two days. With what they found around the place in the way of odds and ends of lumber, some extra sash, and a discarded parlor heater the whole thing didn't cost over \$35.00 actual cash outlay. Of course, if you go in for concrete walls and a little automatic hot water heater those items alone cost over \$100.00 without figuring labor, and they are certainly worth it. Plank or double boarded walls are very good, however, and some sort of stove placed in the north end of the house, with the smoke pipe running to the other end and out, will prove far superior to hotbeds for starting early plants.

Hot manure costs from \$10.00 to \$12.00 a cord. That is the going rate today. It requires about a 24-sash hotbed area to equal the capacity of a 10 x 30 foot plant house and a 10-sash frame along side heated by the hot-water system. It takes at least 4 cords of manure for the hotbeds. That is \$40.00 to \$48.00. The hot-water heater in the plant house requires 2 tons of hard coal from February 15 until warm weather. That is \$32.00.

(Continued on page 3)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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CALENDAR

Feb. 24-28—Homemaking Department
recess.

March 12—Farmers' and Homemakers'
Day.

Old Fashioned Gardens For Tercentenary Year

The celebration this year of Massachusetts 300th anniversary is, naturally enough, concerned with the antiquities of the Commonwealth. Yet, among all that are old and venerable—among heirlooms of the home, relics of the sea, and monuments to human sacrifice—there is no inheritance that lives, in a real sense, save the old-fashioned garden. Around and about the old-fashioned garden lingers the same fragrance of moistened earth and bruised foliage and opening flowers that delighted the nostrils of our forefathers.

In this tercentennial year let us welcome to our colonial gardens the uncounted thousands that will tread historic Massachusetts turf. Let us rejuvenate uncared-for gardens of other days. And let us devote ourselves to the making of old-fashioned gardens wherever the architecture of our dwellings and the limits of our grounds permit. In the making we have a wide choice of plant materials. We need not go back to all the old varieties, nor can we, for time has brought us finer types that do not in any way violate the simple dignity and directness of the gardens of yesteryear. Some of the old standbys are here presented, without the comment they so much deserve.

Bachelor's Button, Beebalm, Borage, Calendula or Pot-Marigold, Candy-tuft, Canterbury-bells, Clary, Colum-

bine, Coreopsis or Calliopsis, Dahlias, Daylily, Dittany or Fraxinella, Fairmaids-of-France, Feverfew, Forget-me-not, Four-O'Clock, Garden Balsam, Garden Heliotrope, or Valerian, Garden Pink, Germander, Gypsophila or Babysbreath, Hollyhock, Honesty or Moonwort or Silver Shillings or White Satin or Money-in-both-pockets, Honeysuckle, Hyssop, Iris, Johnny-jump-up, Larkspur, Lilac, Lily, Lily-of-the-valley, Marigold, Marjoram, Mignonette, Monkshood, Morning Glory, Nigella, Obedience or Physostegia, Pansy, Penny, Periwinkle, Petunia, Phlox, Plantainlily, Poppy, Portulaca, Primrose, Ragged Robin or Meadow Campion, Rose Campion or Mullein Pink, Rose-mallow, Rose, Saffron, Southernwood or Old Man's Beard or Old Woman or Smelling Wood or Maiden's Ruin, Spiderwort, Star-of-Bethlehem, Stock or Gilliflower, Sweet Alyssum, Sweet Lavender, Sweet Marjoram, Sweet Peas, Sweet Rocket or Queen's Gilliflower, Sweet Scabious or Scabiosa, Sweet-scented Geranium, Sweet Violet, Sweet William, Syringa or Mock Orange, Thrift or Statice, Thyme, Valerian, Verbena, Veronica or Speedwell, Yarrow or Milfoil, Zinnia.

Let us then gather about us some of these old-fashioned flowers and make such a garden as our grandmothers had.

—H. Linwood White.

Essex County Poultry Association

On the invitation of County Agent F. C. Smith and Instructor W. B. Moore about sixty (60) poultrymen in the county met on Wednesday evening, January 29, for the purpose of organizing an association to represent the poultry industry in Essex County.

A very fine supper was served at 6.30 by the Homemaking Department of the School after which those present discussed the motive and method of handling such an organization. A set of Rules, Regulations and By-Laws was adopted and the following officers were elected: President, Homer Rowell, Groveland; Vice President, Ray Connors, Hamilton; Treasurer, Norman Morgan, Andover; and Secretary, William B. Moore, West Peabody. An Executive Committee of three members were chosen: Robert Parkhurst, Boxford; John W. Hall, Jr., Ballardvale; and Dimon Lockwood, Topsfield.

It is the plan of the Association to have about four (4) meetings a year and have a well-known speaker at some of the meetings. After the business meeting the members listened to an illustrated lecture on "Breeding Principles" by Professor V. A. Rice of the Massachusetts Agricultural College.

Homemaking Department

Most of the graduates of the Class of 1929 are now employed in the various occupations for which they trained while students in the Homemaking Department of this School. They have secured positions as dietitians, student nurses, mothers' helpers, tea room and laboratory assistants. A few of the graduates are continuing their education and three of the graduates are married.

Dorothy Wilson of Swampscott and Edna Bamford of Middleton are employed in the alteration department of Lang's, Salem.

Ruth Stultz and Anita Williams are student nurses at Salem Hospital.

Grace Torsen of Lynn and Lois Brander of Saugus are employed as laboratory assistants at the Essex County Agricultural School.

Enaise St. John is employed at the Putnam Tea House, Danvers.

Helen Ridderstrom, Lynn, and Viola Messer, Methuen, are students at the Framingham Normal School.

Norma Nickett, Haverhill, is a student nurse at the Gale Hospital.

Rita Senior of Byfield is a student dietitian at the Peabody Hospital.

Miriam Howard, Danvers, is mother's helper in the family of Mrs. I. C. Hopkins and is spending the winter in California.

Ida Monsell, Amesbury; Evelyn Hudson, Lawrence, and Sylvia Sharples, West Newbury, are now married and establishing homes of their own.

—Grace A. Gilkey.

School Notes

The sophomore class entertained the faculty and students at a Valentine party on Feb. 14. Members of the class presented two short plays, "The Touchdown" and "Hindering Cupid."

G. O. Oleson, extension editor for the Massachusetts Agricultural College, is giving a course of three lessons on agricultural journalism to members of the School Staff. March 17 and 31 are the dates for the next two meetings.

Chebacco Pomona Grange held a mid-winter meeting at the School on February 19.

A patriotic program consisting of songs and essays was presented at the Washington-Lincoln assembly on Feb. 21.

The Senior Dance was held on February 21.

Fifty-three (53) persons paid their dues and as a result of the interest and enthusiasm shown at this first meeting it is hoped that the organization will grow to be of lasting influence in the county.

—William B. Moore.

Short Course in Dairying

Because of the continued demand for dairy information a second class for dairymen and milkhandlers is being formed at the Essex County Agricultural School. This will be a ten weeks' course for milk inspectors, distributors, dealers and producers. The course will commence on Wednesday, February 26th, and close on April 30th. The class will be limited to twelve members. The instruction will be given by the instructors of the Dairy Division of the School, assisted by the County Agricultural Agent and necessary outside specialists.

The following will be some of the subjects covered in the course: Testing of milk for butter fat; total solids; sediment; acidity; adulterations and preservatives; watering, skimming; the methylene blue test for keeping quality; the detecting of flavors and their cause; scoring of milk; bottles and caps; bacteria, good and bad; detecting causes of high bacteria; milk-borne diseases and how to avoid them; the equipment for cooling, handling, pasteurizing, and the operation of the same; defects and how to overcome them; legal requirements; milk regulations; farm scoring; milk horses, etc.



DR. JAMES D. BREW OF CORNELL
ON FARMERS' DAY PROGRAM

ELIZABETH F. HEWITT, who attended here 1921 to 1923, tells us that she is married (George Hanna) and living at 19 Collins Street, Newburyport. We are always glad to hear from those who were unable to complete their course, as well as those who do.



Interior of Sash House built by Arthur Gordon of Rowley, a graduate of this School. Note the narrow ledge in the cement work. This was Arthur's idea for supporting one side of the plant beds.

EDITOR'S NOTE—A six-foot model of a plant house made by Harold Wilson, graduate of this School and now employed at the Market Garden Field Station, Waltham, will be on display Farmers' Day, March 12th.

Build A Plant House

(Continued from page 1)

The heat in hotbeds is never constant. It fluctuates with the weather. Loss of plants from freezing and damping off is common. Don't take chances with an uncertainty.

You can build a plant house while you are getting the hotbeds ready and then you have something permanent. And what a joy to be working under cover when those raw March winds begin to screech and howl!

Next fall you can ripen green tomatoes in the plant house. Or, set tomato plants in August and harvest 200 pounds of high-priced tomatoes before any heat is necessary; then a crop of radishes or lettuce or rhubarb. Certain growers who transplanted dandelions into their plant house got 35 to 50 cents a pound retail in January.

Does it pay to operate a plant house? Try it and be convinced!

Your County Agricultural Agent has plans and specifications for building a plant house. Send for your copy and see how easy it is to follow the instructions.

—Ray M. Koon.

Dairymen, Attention! Danger Ahead

Avoid overproduction by:

1. Culling old cows.
2. Culling low-producing cows.
3. Culling diseased cattle.
4. Culling unpromising heifers.
5. Culling injured cattle.
6. Raising only one calf to every five cows.
7. Raising the exceptional calf only.
8. Using more dairy products in the home.
9. Keeping milk production balanced.

Good Varieties of Vegetables for Commercial or Backyard Gardeners

These varieties are recommended by the vegetable division of the Essex County Agricultural School.

- Asparagus—Mary or Martha Washington.
- Beans—Green Bush, Bountiful; Wax Bush, Sure Crop; Pole, Kentucky Wonder; Shell, French Horticultural.
- Beets—Crosby Egyptian.
- Cabbage—Golden Acre, Copenhagen Market, Danish Ball Head, Savoy.
- Carrots—Chantenay, Danvers Half Long (Hutchinson Strain).
- Cauliflower—Snowball.
- Celery—Golden Plume (New Wonderful), Boston Market, Giant Pascal.
- Corn—Golden Bantam, Whipple's Yellow.
- Cucumber—Davis Perfect, Arlington White Spine.
- Lettuce—May King, New York No. 12, White Big Boston.
- Onions—Danvers or Southport Yellow Globe, Japanese Onion Set.
- Parsnips—Hollow Crown, Model.
- Peas—Laxtonian (Hundredfifteen) (Blue Bantam) (Pioneer), Telephone.
- Peppers—Harris' Earliest, sweet; California Wonder (sweet), Squash (hot).
- Radish—Scarlet Globe.
- Spinach—Savoy, Long Standing or New Zealand.
- Squash—Squash, Straightneck; Fall, Warren Turban, Boston Marrow; Winter, Hubbard.
- Tomatoes—Bonny Best, John Baer, Marglobe, Stone.
- Turnips—Purple Top Milan, Purple Top Strap Leaf.

—C. M. Stearns.

10. Advertising milk and dairy products and keeping the price of milk stable.

Does Your Kitchen Smile?

Every woman likes a pretty kitchen whether she does the work in it or not, but not everyone knows how to go about it to have one. There is a certain magic about a cheery, attractive, livable kitchen which invites the homemaker to her work and exerts a subtle influence upon the other members of the family.

You can recall, no doubt, some dull, drab kitchens that you have seen—one with gray walls, natural pine woodwork, table and chairs, dark floor, and black stove; or possibly one with olive green walls, dark red woodwork, gray table and chairs, and white curtains. Neither kitchen has anything to commend it so far as attractiveness is concerned, and certainly no homemaker would choose to work in such a gloomy place.

Considering the large amount of time that the homemaker spends in her kitchen, it should be made just as attractive and cheery as possible; for certainly she can be more interested in preparing the meals for the family and in doing the other routine tasks and will be much happier if she has an attractive place in which to work.

There is no better way to transform the unattractive, drab kitchen into one of charm than to change the color scheme. A can of paint, a good brush, and a few hours of labor will transform a dull, drab kitchen into one that fairly smiles and is a joy to work in.

For the walls that are to be done over, one has a choice of many finishes; but it is well to choose one that will be attractive, easy to clean, and durable.

Washable paint and enamel are among the best finishes, for they are labor-savers and now that they can be had in such lovely colors, they are more in favor than ever.

If the walls are in such condition that they cannot be painted, then one must use some kind of wall covering. If a paper must be used, the varnished kind is a wise choice as it can be washed.

Oil cloth makes a satisfactory finish, for it can be cleaned and is very durable if applied to a good wall surface.

There are many water paints, too, that can be used. These are inexpensive and attractive in color, but they do spot easily and cannot be washed as can the paints and enamels.

The unvarnished wallpaper is often used and it may be had in attractive colors. It is not a durable finish in that it absorbs grease and steam from the cooking of food spots, easily, and must be cleaned by wiping rather than by washing. This paper can be shellacked and varnished after it is

put on the walls to make it waterproof.

The Home Demonstration Agent will be glad to send suggestions for color schemes upon request.

The possibilities are unlimited and many charming effects can be produced according to the dictates of one's fancy. Remember that colorful curtains at the windows, painted furniture, and decorative accessories, such as tea towels, holders, and wall pockets add much to the attractiveness of the kitchen, and do not forget the flowering plant or the pot of parsley.

—Mrs. Harriet J. Haynes,
State Home Management Specialist.

Better Homes Day June 6

**Dr. Caroline Hedger Speaker
For Better Homes Day**

Those who heard Doctor Hedger on our Better Homes Day in 1926 will be delighted to know that we have been able to secure her services again this year. We were glad to change our date from Wednesday, June 11, to Friday, June 6, in order that our plans might fit in with her schedule. Be sure and put this down on your calendar.

Better Homes in America Movement April 27—May 3

What is your community doing to participate in this worth-while movement? Plans are being made in some communities for tours, lectures, exhibits, etc. Why not get your teachers, ministers, merchants, granges, and librarians to start something toward making Better Homes in your community which may culminate during Better Homes Week? The Home Demonstration Agent will be glad to give suggestions and cooperate with any community in Essex County.

The following people have accepted the Town Chairmanship in their towns for 1930:

Mrs. Robert E. Little, Boxford.
Mrs. George O. Hart, Box 69, Essex.
Mrs. George Mitchell, 18 King Street, Groveland.
Mrs. Walter F. Poole, Ipswich.
Mr. George Gifford, Middleton.
Mrs. Irving P. Johnson, Central St., Rowley.
Mrs. L. G. Dodge, Meeting House Hill Farm, West Newbury.

Essay Contest Winners

The winners of the Prize Essay Contest of the Massachusetts Agricultural Fairs Association for the year 1929 have recently been announced. The contest was open to all students

I Am Glad I Joined the Vegetable Preparation Group

Sociability was the key-note of this group, only equalled by our elation at the addition of so many appetizing recipes to our files.

My family found the tomato aspic salad a relief from the monotony of stewed tomatoes and the spring casserole likewise dressed up the spinach. The children favored cream of spinach soup as a change from the cream soups I usually make. The California chicken credits us with three vegetables and is so handy for lunch as our little school girl is always an hour late. On the same order, we ate with zest the stuffed onions.

Dishes appealing to the children proved to be the raw vegetables, chopped spinach sandwiches, grated garnishes of carrot and beet, cabbage salads, and the carrot custard with its effect of orange-tinted cocoanut. The colors are inviting and the flavor is undulled.

Simplicity of preparation was another virtue. My nine-year-old daughter has twice prepared the white sauce with excellent results and together with her younger brother had an enjoyable time making blushing apples. I find their appetites are so much better if they have a hand in the cooking.

I have been using more vegetables and two of the children are not so much troubled with constipation. They tend to have severe colds which are so long in clearing up and I am definitely working on this point through the use of more vegetables and daily use (where I formerly gave it for short periods) of cod liver oil.

We were delighted with the new fruit salad dressing, also the junket dessert which is so appropriate when the rest of the meal is heavy.

—Mrs. Emma True Thurlow,
Danvers.

in the senior high or vocational schools who visited an agricultural fair during the year. Four cash prizes were awarded to the students submitting the best 1,000-1,500 word essays on the topic, "What I Learned at an Agricultural Fair." Winners of the second and third prizes are students at this School.

Winners

First prize—\$20.00—Hazel A. Colburn, Dracut, Mass.
Second prize—\$15.00—Carl Swanson, Pigeon Cove, Mass.
Third prize—\$10.00—William Costley, West Lynn, Mass.
Fourth prize—\$5.00—Marion Forsyth, Sharon, Mass.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 11

HATTIORNE, MASS., MARCH, 1930

NO. 3

The Horse Barn Completed

More than seventy-five students have had a hand in the construction of the new barn, which was opened to the visitors on Farmers' Day. Many will carry away suggestions and instruction in building which can be applied on home construction projects.

The building was started about a year ago, and has been in the process of construction during the year, thus enabling these students to get some practical experience in building. This experience was quite varied, as there were four trades represented, namely, masonry, carpentry, painting and blacksmithing.

The barn is 36 by 80 feet, with a shed 16 feet wide the entire length of the north side. Sixty-four feet of this shed is open, to be used to house wagons and carts; sixteen feet closed, to be used as a manure pit.

The first floor of concrete is divided in the center. The front half, 36 by 40 feet, is to store farm machinery. There are no posts in the center, as the second floor is carried by three 20-inch steel girders 36 feet long.

The rear half, for horses, has a harness room provided with a sink and stove, a grain room, eight stalls and one box stall. The inside is sheathed throughout in North Carolina pine and finished in the wood.

A track-system carrier takes care of the manure, making it easy to keep clean. One unique feature is the watering trough made of concrete with recessed panel in front with the figures "1929" in the center.

The second floor, 36 by 80 feet, is entirely clear up to the roof, which is the balloon type, thus doing away with posts and cross beams, giving the maximum amount of hay storage. There is a hay track the entire length providing for unloading at either end. The barn is equipped with the latest type of ventilating system throughout.

The entire barn is shingled with Bird Green Asphalt shingles. Trim-mings are painted a light tan.

We used approximately 1,000 bags of cement 38,000 feet lumber, 100 squares shingles, and nearly one ton of nails in the construction of this building.

The new barn is a very creditable addition to the farm buildings at the school.

—Fred R. Hardy.



THE NEW HORSE BARN: A NECESSARY ADDITION TO THE SCHOOL FARM BUILDINGS

Farmers' and Homemakers' Day

With ideal weather and a large group of excellent speakers on the program for the sixteenth annual Farmers' and Homemakers' Day, 1,200 men and women visited the School on Wednesday, March 12. In addition to the educational exhibits of the Extension Service and the two other departments of the School, there were many commercial exhibits, all of which attracted the attention of visitors.

The morning program began at 10:30, when Dr. Brew of Cornell spoke on, "Quality Milk for the Consumer." He was followed by Miss Marguerite W. Stoddard, who spoke on the plans for the celebration of the Massachusetts Tercentenary Committee.

In the afternoon, sectional meetings were held in fruit, dairy, vegetables, poultry, gardening and nutrition. All of these meetings were well attended and in some cases the rooms in which they were held were crowded. Among the speakers on the afternoon program were Dr. James D. Brew and Professor James E. Rice of Cornell University; Professor F. H. Branch, W. H. Thies, H. B. Rowe, Julius H. Frandsen, and Ralph W. Donaldson, all of the Massachusetts Agricultural College; Professor A. E. Wilkinson from Connecticut Agricultural College,

Other speakers on the program were Mr. William N. Craig of Weymouth; Messrs. Koon, Whitecomb and Guba of the Field Station in Waltham; Professor Fred A. Cole of Worcester County, and Mr. Clarence H. Parsons of the Synthetic Nitrogen Products Corporation.

New problems in agriculture and homemaking arise each year, and the purpose of these meetings is to shed new light on these problems for the people of Essex County. That these meetings are appreciated is plainly indicated by the increasing number who attend them.

Much interest was aroused by the milk-testing contest of the Extension Service of the School. The results of the contest proved beyond doubt that most people cannot tell the difference between raw milk and that which is pasteurized. In the contest 161 persons voted; 55% voted correctly on No. 2 jar, which was pasteurized, and 45% voted correctly on No. 1 jar, which was raw milk. The results of this contest tally closely with results of similar contests held elsewhere.

A check-up of the number of cars parked about the grounds at 2:30 P. M. showed a total of 346. It is estimated that there were between 1200 and 1400 people in attendance during the day.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
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CALENDAR

April 28-May 5—Homemaking Vac-
ation.
May 2—High School Day at M. A. C.
May 24—Junior High School Field
Day at School.
June 6—Better Homes Day.
June 18—Parents' Day, Homemaking
Department.

The Old-Fashioned Garden

The old-fashioned garden is not a
thing to be made to order after a
pattern and set down upon the ground
certain to be right, providing it is
limited to plants of a century ago,
and boasts all the material elements
which it is known old gardens held.

The old-fashioned garden of yester-
day was a large garden, of today per-
haps a small garden.

The real old-fashioned garden had
a broad open grass center, broken by
trees here and there, pear, apple,
white birch, quince, tulip, and cherry.
The outer borders and rich deep cor-
ners of trees and shrubs were brought
down to the grass by masses of peren-
nials and annuals, many of which
were used in making the family medi-
cine.

There were beautiful plants,—lilac,
mock orange, bridal wreath, Japanese
quince, viburnum opulus, barberry,
blueberry, laurel, box, roses in profu-
sion, peony, daffodil, violet and holly-
hock.

The old-fashioned garden was a
restful place; the well was there with
its buckets, beehive, sundial, rustic
seats, walks, terraces with their steps
of grass, stone, logs or even bricks.
Yes, they were all there, but not the
central attraction,—the garden was
the attraction.

The old-fashioned gardens were not
as many seem to believe, nondescript
assemblages of plants thrown to-
gether; they were controlled in size
by the available labor, which means
they were well-kept. There was neat-
ness and exactness that characterized
the times, that sort of pompous ele-
gance which prevailed in cavalier,
courtier and puritan alike, during the
age of knee breeches and powdered
hair.

It was a formal age, and punctil-
ious; garden design reflected this, con-
trary though it is to our ideas to
think of the old-fashioned garden as
formal. —C. S. Wright.

Public Speaking Contest

The county district elimination for
contestants in the annual public
speaking contest for agricultural stu-
dents was held at this school on Fri-
day, March 7. Two teams of four
members each, representing the Nor-
folk County and the Essex County Ag-
ricultural Schools, participated.

The contestants had chosen short
interesting speeches, all pertaining to
agriculture, and the result was an in-
teresting contest between the two
schools.

The winners in this semi-final event,
who will represent the county school
district at the final contest to be held
at the M. A. C. on Friday, May 2, are
as follows:

Raynham Clark (Essex Agricultural
School), first.

Clifford Bryer (Essex Agricultural
School), second.

Ida May Perkins (Essex Agricul-
tural School), third.

Chester A. Peterson (Norfolk Agri-
cultural School), fourth.

M. A. C. Forum on WBZ-WBZA Mondays at 6:15 P. M.

April 7—Farm Management Problems.
F. H. Branch.
Apr. 14—Spring Plantings of Shrubs.
L. S. Dickinson.
Apr. 21—What's New in Vegetables.
R. M. Koon.
Apr. 28—Having a Good Lawn This
Summer. L. S. Dickinson.

NOTICE TO ALUMNI!

Spring Dance

At ESSEX AGGIE

FRIDAY EVENING

APRIL 25

Summary of Report of Athletic Association

The Athletic Association held a
meeting on March 15, 1930. The
treasurer's report showed that the as-
sociation does a large business during
a year. The total receipts from gifts,
dues, guarantees, equipment sales and
candy sales exceeded \$2,900.00. The
total expenses of officials, transporta-
tion, athletic equipment, and candy
exceeded \$3,100.00. The association
was able to stand this loss, however,
leaving a substantial sum in the bank
to start future seasons on.

The report of the Athletic Director
showed that the football team won
7 games and lost 3; that the total ex-
pense was \$484.00, and the total guar-
antees were \$356.00, leaving a net loss
of \$128.00; that the basketball team
won 12 and lost 3, with a total ex-
pense of \$225.00, and guarantees of
\$30.00, leaving a cost of \$195.00 for
the season; that the hockey team won
3, tied 1, and lost 4, with a total ex-
pense of \$120.00 and no guarantees.
That the girls' basketball team won
6, tied 2, and lost 2, with a total ex-
pense of \$50.00 and gate receipts of
\$7.50, showing a cost of \$42.50.

The association voted to support the
giving of sweaters to all those who
earned a letter in any of these sports:
football, basketball, track, hockey,
and girls' basketball, if they had not
previously received a sweater.

The officials for the year 1930-31
were elected. Stanley Chlebowski, a
letterman in football, basketball and
track, is president; Lester Cole, a
three letterman is vice-president;
Elinor Bacon, a girl basketeer, is sec-
retary; and Gordon Cool, a basketball
"E" man, is historian. The advisory
council consists of Mr. Eastwood, Mr.
Wright, George Perkins, Raynham
Clark, Mildred Roberts and Edith
Wilson.

—Philip Couchig.

Alumni Notes

CALVIN POORE, 1920, is superin-
tendent of the Col. S. D. Parker estate
in Canton.

HAROLD STEVENS, 1918, superin-
tendent of the Ropes Memorial, Salem,
has given numerous talks before gar-
den clubs, and is now engaged in
writing "Timely Tips for Florists,"
which appear every Saturday in the
Salem Evening News.

Palmer S. Perley, 1927, of Rowley,
will be employed by the Massachusetts
Horticultural Society during the an-
nual spring Flower Show.

HARRY LEAR, 1927, is operating a
farm of 15 acres on the Andover
Turnpike in Danvers.

LIONEL ROBOTOR, 1927, is to work
on a 10-acre farm in Georgetown, re-
cently purchased by his father.

Start Right on the Spray Program

Thoroughness and timeliness are of great importance in the effectiveness of the spray program on fruit trees. Peach-leaf curl, that disease of peach trees which turns the leaves yellow with tints of red and causes thickening and finally defoliation, may be controlled by thoroughly spraying the entire tree, especially the buds, with liquid lime-sulphur diluted one part to fifteen of water. This spray should be applied before the buds start to swell.

Apple scab, the most troublesome apple disease, is best controlled by spraying when the buds are in the pre-pink condition, that is, while the first leaves are unfolding and the blossoms are still clustered together. Timeliness is particularly important with this spray. The exact time may be learned from the Agricultural School. To give the proper protection all the foliage should be thoroughly sprayed with liquid lime-sulphur diluted one gallon to fifty of water mixed with two pounds of dry arsenate of lead.

—C. M. Wood.

Prevent Plant Losses

No disease causes a greater reduction in the quantity of seedlings grown than Damping-Off. A lack of sufficient plants for planting the desired acreage as a result of Damping-Off causes no small amount of concern to the grower, and often tempts him to purchase plants from an outside source, which is not a desirable practice.

The several distinct organisms which cause Damping-Off inhabit the soil, and while it is possible in most cases to provide soil and atmospheric conditions which will prevent infection of the young seedlings, there are times also when sterilization of the soil would be a more certain means of controlling the disease. For disinfecting the soil, Dr. E. F. Guba, of the Waltham Field Station, recommends formaldehyde diluted at the rate of 1 gallon to 49 gallons of water, and applied at the rate of one gallon of the solution per square foot. This is very effective, as are steam and hot water also. Soil disinfected with formaldehyde is ready for use 10 to 14 days after treatment.

As it is now too late to sterilize the soil, it is suggested that careful attention be given to ventilation and watering. A warm and even temperature and a well-lighted seed bed are very important. Since a thick stand permits of less aeration and slower drying of moisture than a thin stand, it is important that the sowings be

thin rather than thick, and shallow rather than deep.

As a rule, Damping-Off is found where plants are crowded closely together, improperly watered, and where excessive dampness and high temperatures are allowed to prevail. Since moisture and temperature play an important part in the development of Damping-Off, the proper regulation of these conditions is a matter to consider in the control of the disease.

A hot-water heated hotbed with pipe lines on each side of the bed is a desirable means of controlling the dampness around the seedlings. Such a system combined with efficient ventilation when needed, would insure good control of the disease. The plants should be watered in so far as possible only on bright days, in order to insure quick drying of the surface soil and the moisture on the seedlings.

—Ray M. Koon.

Tested Herds on Increase in Massachusetts

Substantial increase in the number of cattle under supervision for tuberculin testing in Massachusetts is shown in the annual report of the Director of the Division of Animal Industry, Evan F. Richardson, which will be published soon. The report shows that there was an increase of 1,800 herds which were tested and came under State and Federal supervision during the year. These herds totaled 18,279 cattle, and bring the total of tested animals under supervision in the State up to 58,045. This is about 30 per cent of the cattle in the Commonwealth.

—Mass. State Dept. of Agriculture.

Grange Assignments for Staff Members

March 26—Middleton Grange—Miss Crawford, Home Demonstration Agent to speak.

April 16—Chebacco Pomona—Instructor Moore to speak on "Brooding and Rearing of Chicks."

April 23—Haverhill Grange—County Agent to speak on "Quality Milk." Instructor Meigs to talk on "Bee-keeping for Profit."

4-H Clubs to Compete for Forestry Medals

This year, for the first time in the history of Massachusetts 4-H Club work, a medal will be given to the individual and a plaque to the club that accomplishes the best work in 4-H forestry club work, according to an announcement from R. B. Parmenter, state extension forester, and H. A. Leland, assistant state club leader from the Massachusetts Agricultural College at Amherst.

These medals are donated by the American Forestry Association in the interests of better forestry in towns and communities. The winner of the individual medal will be selected on such points as the number of years in forestry club work, the amount of work accomplished, the quality of work, the leadership ability of the boy, and his record book. In selecting the best forestry club, the number of forestry clubs in the county will be considered, also the number of members within the club who complete their work, the completeness with which the club requirements have been carried out, the quality of work done, the percentage of completion of the members in the club, the club program, and the community forest service given by the club.

In Newbury, Newburyport and Andover there are 4-H forestry clubs already organized and working for these medals. Last year the Newbury forestry club, known as the Newbury Forest Rangers, did a wonderful piece of work in thinning and pruning on the Evans Estate, the plot being on top of Old Town Hill, Newbury.

—H. J. Shute.

Quality Products Label Used By Poultry Dealers

Poultry raisers of the State may now secure from their county agents, a list of breeders who have been inspected by the State Department of Agriculture and have qualified for the use of the New England Quality Products Label on the day-old chicks they offer for sale. The Department is continuing its inspection work, but as the season for the purchase of day-old chicks is at hand, a list of those who had passed, up to March 1, has been issued. From time to time, as new names are added to the list, they will be given to the county agents. The list can also be secured from the State Department of Agriculture.

—Mass. State Dept. of Agriculture.

Middleton to Cooperate with Better Homes in America Movement

Plans for supporting the Better Homes Movement in this town are going forward under the local chairman, George E. Gifford.

It is proposed to have a meeting of the townspeople in the Town Hall on April 30, at which time the moving picture, "Transformation," will be shown. There will also be an exhibit of Better Homes posters and home-craft articles made and repaired in the manual training classes of the Middleton School. The meeting will then be thrown open for discussion of the topic, "Needs of Our Community."

Another feature planned, is to have certain houses which have been selected for some particularly desirable feature which they possess, thrown open to the public on one day of the week.

The pastor of the church has agreed to co-operate on Sunday, April 27. The librarian has also been asked to display books dealing with house construction and family life.

During Better Homes Week, April 27 to May 3, several Middleton women are to make the trip to the Priscilla Proving Plant, and a tour about the county under the guidance of Marion P. Crawford, Home Demonstration Agent.

With the church, school, library, and townspeople co-operating, the Better Homes Movement will have a new significance in at least one Essex County town.

Canning School to be Conducted by Prof. Cole of M. A. C.

Free instruction in canning will be given by Professor William R. Cole in the Haverhill High School, Domestic Science Rooms, on the following dates: April 11, May 9 and June 13. The lessons are scheduled to begin at 2:00 p. m.

All women interested in home canning will be welcome.

Is Your Kitchen Cheerful and Charming?

In our last issue, Mrs. Haynes, our State Management Specialist, told us there was no reason why our kitchens should be drab and ugly places. She believes it is just as worthwhile to beautify the kitchen as any other room in the home.

Mrs. Haynes will tell how this may be done, at meetings to be held in various sections of the county during

April. The following schedule will enable all homemakers to attend at least one of these meetings. All meetings will begin at 2:00 p. m.

April 9—E. C. A. S., Agricultural Building.

April 25—Newburyport Y. W. C. A.
April 26—Saugus Center, Grange Hall.

May 15—North Andover, Health Center.

The latter meeting will be conducted by the Home Demonstration Agent.

A cordial invitation is given to all homemakers to attend whichever meeting is most convenient.

—M. P. Crawford.

Home Furnishing Group to Visit Priscilla Proving Plant

The members of the Home Furnishing groups, with their friends, are planning to visit the Priscilla Proving Plant during Better Homes Week. The date will be April 29.

As a part of the Better Homes in America Movement the Home Demonstration Agent is planning to conduct a tour, visiting interesting homes in several communities in the county. The date for this tour will be May 2.

Further particulars will be given later.

Bread Making Demonstrated to 4-H Club Members

Butterscotch rolls, cinnamon rolls, and cheese biscuits were among the delicacies demonstrated to 4-H Club members by Miss Margaret Larsen of the Russell-Miller Milling Company.

Twenty-two 4-H Club members of Essex County met with the County Club Agent, Horace J. Shute, at the home of Mrs. Henry Albrecht, 23 Second Street, North Andover, on March 15 at 10:00 a. m. The purpose of this meeting was to train the girls for the scholarship contest which is held at the Brockton Fair each year. Miss Larsen demonstrated the principles of making yeast bread, baking-powder biscuit and quick bread variations. This was done step by step, with a thorough explanation of each. Club members were present from Georgetown, Danvers and North Andover.

The Russell-Miller Milling Company gives a one hundred dollar scholarship prize each year at Brockton Fair for the girl who makes the best loaf of yeast bread and the best pan of baking-powder biscuit.

Many of the girls are planning to enter the home economics contest this fall and they found the demonstrations given to be very helpful.

The meeting closed at noon with 4-H Club songs and games.

—H. J. Shute.

Homemaking Department Notes

Madalyn Doyle, Lawrence, is employed in office work at the Arlington Mills, Lawrence.

Mildred Watson, Danvers, is a student nurse at the Beverly Hospital.

Hazel Sullivan, Salem, is a student nurse at the St. Elizabeth Hospital, Brighton.

Miriam Hilton, Danvers, is a student in the School of Occupational Therapy, Boston.

Katharine Cashman, Danvers, is employed as mother's helper for Dr. F. S. Marchand, Salem.

Ruth Carlson, Danvers, is employed at Woolworth's, Danvers.

Helen Skonicki, Salem, is a student at the School of Domestic Science, Boston.

Louise Sproul, Byfield, is employed at the Anna Jacques Hospital in Newburyport.

Florence Gross, of Salem, is a student at Burdett Business College, Lynn.

School Notes

The 4-H Club Orchestra of Haverhill, organized by Ernest A. Howard, Class of 1918, gave a splendid concert at the School assembly on Feb. 28.

The Class of 1930 held a farewell banquet and social in the Homemaking Department on March 21.

The Sophomore class of the Agricultural Department presented the "Mock Trial of a Soil Robber" at the Joint Assembly on March 21.

Junior High Field Day has been set for May 24.

Instructor Thurlow read a paper on the "History of the Old Horse Barn" at the assembly on March 17. The barn, which is over 100 years old, is now being torn down.

Homemaking Department Library

The library in the Homemaking Department is a center of great activity. In the fall the daily circulation averaged about 100 books. The daily circulation at the present time averages 140 books or better. Perhaps this increase can be accounted for through the purchase of about 40 books for recreational reading. These books are read in addition to the large number used for reference reading. They were purchased from fines collected from books overdue and from gift money received last spring from organizations which were served luncheons at the school. —Verna Clarke.

ESSEX FARMER AND HOMEMAKER

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VOL. 11

HATHORNE, MASS., APRIL, 1930

NO. 4

The Old Horse Barn and Its Builder

Director Smith after formally opening the new horse barn on Farmers' Day, March 12th, turned the old one over to the Mechanic's Division to be torn down. It is not without regret on his part that the old landmark passes. He realized, however, that not only was it wrongly situated for the work of the school, but it was so badly rotted as to be beyond repair.

The barn was built in 1836 by Sylvanus B. Swan, of native white pine from his own woodlot in Middleton. It was of old-fashioned construction, measuring 40 feet by 50 feet. The ridge was 30 feet from the ground. The frame was pinned together with oak pins. The planks were pinned to the joists with square pins. The great beams measured 9 inches by 11 inches by 40 feet. The barn had a hay storage capacity of 35 tons. The cellar had a height of 7 feet. The farm, of which this barn was a part, took in much of the village of Hathorne. There were other lots in Middleton and North Andover.

Mr. Swan was born in Bristol, New Hampshire, June 5, 1806. On Nov 2, 1836, he married Mary Ann (Putnam) Tyler, daughter of Squire Eleazer Putnam, who owned the farm which later became the property of Mr. Swan. Three children were born of this union, Louisa, Mary, and Elizabeth. These all passed away before they reached womanhood. Mrs. Swan died in 1844. Two years after the death of his wife, Mr. Swan married Miss Lydia Adams of Londonderry, New Hampshire. There were no children born of this union.

Mr. Swan was an old-time farmer. His cattle were Durham, while Devon oxen were his pride. His cash crops were butter, oats, cord wood, and some hay. By hard work and careful management he amassed in 43 years a fortune of \$14,600.00

He was very religious; in money matters honest but close. He was very generous as to missions. He was tall and bony, in speech abrupt. In his appearance very neat.

This man after a life of usefulness passed away Jan. 25th, 1881, at the age of 75 years. His wife died Aug. 3rd, 1883.

From 1883 the barn has been owned by the following people: 1883 J. Webb



THIS CENTURY-OLD LANDMARK GIVES WAY TO MODERN PROGRESS

Barton, 1884 Gardner Barton, 1905 Helen J. Butler, 1906 Rose Webb, 1906 Salem Savings Bank, 1911 Trustees of the House of the Angel Guardian, and on Aug. 20th, 1913, it passed to the County of Essex. Worn out through a lifetime of service, the old barn has been kept going through 17 years of patching and repair. It now has gone.

Why take note of its passing? There was nothing striking about it. It was simply and plainly made. There was no timber of unusual size or quality about it. From a mechanical standpoint the new barn is by far the better of the two. Why not let it be forgotten? Because it was symbolical of an all-sufficient farmer, the man who raised his own food, the material for his clothes, buying merely tea, coffee, and sugar.

The building of the new barn represents an age of specialization. Each item of raw material represents different workers and territories. Not so with the old barn. The farmer cut his timber and hauled it. He gathered the stones and built his wall. He, with his neighbors, had a framing bee; if not a framing bee, a carpenter was hired to help the farmer and his men build the barn complete. To us the barn represents a wonderful era in American history. It was representative of a strong, fine people, of noble, kindly virtues. Time and inevitable change decreed its passing. We shall miss it. The barn has served its day and generation well. We can do no better.

Henry P. Thurlow,
Instructor in History.

Blue Ribbon Day Coming

Boys and girls of Essex County are now marking Saturday, May 24, on their calendars.

The Essex County Agricultural School will entertain the graduating classes of the Grammar and Junior High Schools for the fourth time with tours about the farm and grounds. The buildings, equipment and even the trees on the lawn, together with exhibits of seeds, will and cultivated flowers will all be placarded that the boys and girls may check up their knowledge of an agricultural or homemaking nature.

Three prizes will be awarded in the essay contest. One to the school presenting the best three or more essays on topics to be announced later. One for the best essay presented by a boy and one for the best essay presented by a girl.

Ribbons will be awarded in the Bird and Branch contests as well as to the successful ones in the closely contested events of the athletic program.

Program

- 9.00-10.30 A. M. Registration.
- 9.45-11.00 A. M. Trips over School farm. Homemaking and Agricultural Buildings open for convenience of guests and for inspection.
- 10.00-11.45 A. M. Bird and Branch Contests.
- 11.45-12.30 P. M. Lunch (box) and Community Singing.

(Continued on page 2)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

Persons desiring this publication should
address the Essex County Agricultural
School, Hathorne, Mass.

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CALENDAR

April 28-May 5—Homemaking Vac-
ation.

May 3—High School Day at M. A. C.
May 24—Junior High School Field
Day at School.

June 6—Better Homes Day.

June 18—Parents' Day, Homemaking
Department.

"Practical Bug-ology"

Cut Worms Beware!

Professor Whitcomb at the Market
Garden Field Station, Waltham, has
found that the cut worm does not
have such a "sweet tooth" as was
formerly supposed.

We have been accustomed to put-
ting molasses, oranges, etc., in poi-
soned cut-worm bait, but this prac-
tice is now considered unnecessary.

Professor Whitcomb's experiments
show that the following mixture is
an effective "killer":

1 lb. of Paris Green mixed thor-
oughly into 48 lbs. of Wheat Bran
and this moistened to a crumbly con-
sistency with about $4\frac{1}{2}$ gals. of water.

Use the bait fresh and broadcast
it at dusk at the rate of 20 lbs. per
acre. Cut worms feed at night. Ap-
ply it when seeds are sprouting and
just before or at the same time
plants are transplanted. A second
application a few days later may be
necessary, especially if sod land borders
the garden.

"Soak" the Cabbage Maggots!

According to Professor Whitcomb
the cabbage maggot begins its deadly
work about May 15th in this locality.

The control is to dissolve 1 oz. of
corrosive sublimate powder in a gal-
lon of hot water. Add this to 9 gal-
lons of cold water. Use wooden
crockery or glass containers because
the sublimate rapidly corrodes metal.

Pour at the rate of $\frac{1}{2}$ cup at the
base of each cabbage plant so it will

soak about the roots. Make three
applications at weekly intervals be-
ginning one week after transplanting.

Corrosive sublimate powder, tablets
or solution is deadly poison if taken
internally. The best precaution is to
prepare and use it at once and thus
prevent danger of livestock or chil-
dren getting at it.

Here at the School we get about
100% control of the maggot by the
use of it.

Carrot Rust Fly "Detour"

Early bunch carrot fields act as
hosts for the Carrot Rust Fly which
will in turn infest nearby plantings
of late carrots.

Growers who depend principally on
late carrots may "detour" around
rust fly trouble by not planting early
carrots and by not making any late
carrot plantings until June 10th.

This information is based on recent
advices from Professor Whitcomb of
the Market Garden Field Station,
Waltham.

—E. E. Metcalf.

Homemaking Department

For the past few months the girls
in the foods department have been
receiving very practical training in
waitress work. This was made pos-
sible through the co-operation of the
faculty in their dining room.

It is the aim of the Homemaking
Department to train the girls so they
will be able to meet the demands of
the business world. Last year when
we began our project placement we
received many calls for waitresses.
As all our service was on the cafe-
teria plan the girls had received only
a limited amount of training in wait-
ing on table. Therefore, we decided
to change the service in the faculty
dining room.

Our efforts have all been repaid.
This week a call came from the ca-
terer who was serving the Danvers
Women's Association luncheon, for
fifteen (15) girls as waitresses. Be-
cause of their experience in waiting
on table in the faculty dining hall
we were prepared to meet this call
satisfactorily.

—Miss E. M. Moore.

BLUE RIBBON DAY COMING

(Continued from page 1)

12.30-1.30 P. M. Haverhill Kite Club
Orchestra and Fun Stunts.

1.30-4.00 P. M. Athletic Events or
Indoor Program if rainy.

4.00 P. M. Awarding Prizes.

The organizing of groups is left
with the principals and teachers in
the different schools of the County.

Visitors of the School on that day
are requested to bring lunch as only
light refreshments will be for sale.

—G. A. Mcigs.

Put a Bouquet in Your Fruit Tree

A bouquet placed in your fruit tree
may increase the number as well as
the size of the fruits. Most tree
fruits are more or less self-sterile,
that is, they cannot be depend d upon
to yield a full crop if the blossoms
are pollinated by their own pollen.
Cross-pollination, that is, pollin tion
by pollen from blossoms of a differ-
ent variety frequently overcomes this
difficulty.

Repeated blossoming of a tree with-
out a resulting set of fruit, is an
indication that there is need for
cross-pollination. Either planting a
companion tree of different variety
which blossoms at the same time, or
grafting another variety into the tree
of this behavior, may improve polli-
nation and the set of fruit when
blossom age is reached. Until blos-
soming, which takes a few years, the
bouquet method may act as a sub-
stitute.

Besides pollination there are other
factors which influence the set of
fruit. Most of these factors are how-
ever taken care of in the well-man-
aged orchard by annual pruning, fer-
tilizing, and pest control measur.s.
A good tree location which produces
healthy vigorous growth is necessary
for annual crops of fruits. Unfa-
vorable weather conditions at blos-
soming time are responsible for a
poor set of fruit in some years, either
because the tender blossoms are in-
jured by frost or the bees, the polli-
nating agents, cannot fly on account
of low temperatures, high winds or
excessive moisture.

Practically all tree-fruit yields are
improved by cross-pollination, but the
small fruits, on the other hand, show
less response to this treatment.
Among the apple varieties Wealthy,
Delicious, and McIntosh may be de-
pendent upon to act as good polli-
nators.

If you have an isolated tree or an
orchard of one variety and you sus-
pect self-sterility, try the bouquet
method of pollination.

In the spring when the fruit trees
are starting to blossom, put a few
large branches into a pail of water
and place it in the head of the tree
to be pollinated. A bouquet of any
variety different from the one to be
pollinated will probably help, but a
bouquet of two varieties is better
than one. Keep up the water supply
in the pail, and replace with fresh
blossoms if they wilt.

—C. M. Wood.

A "Feast and a Famine" Garden

Is that the kind yours will be this year, or will you have a uniform and continuous supply of the vegetables you like best during their season? By carefully planning dates of planting and the amount you plant of each vegetable you can have the right kind of a garden.

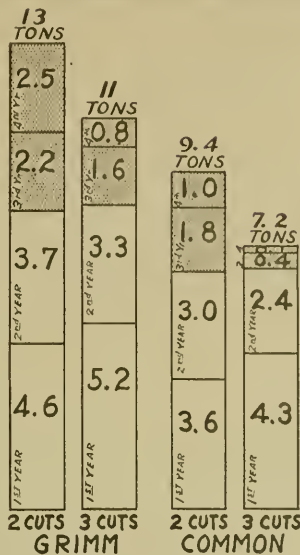
The following diagram shows the harvesting record of a 1929 garden of one-tenth of an acre which made a family of six independent of the green grocer (except for potatoes) for the entire summer with a supply of several vegetables (stored or canned) lasting well into the winter.

Reading across the page the (*) marks indicate the weeks during which each vegetable was actually harvested. The dates on which seed of the vegetable was sown or plants set are also given on the same line.

Reading down the column for each week the (*) marks indicate the different vegetables harvested during that week. In several cases more than one harvest of a vegetable was made during a given week.

Note that except for corn and beans there was quite a constant supply of each vegetable (or a similar one like broccoli, cabbage, and cauliflower) during its season. One more planting of corn and beans (about June 15th) would have filled the gaps in their harvesting period.

Note also that from July 1st to October 26th from six to nine different vegetables were used from the garden each week. "Variety is the spice of life."



YIELDS PER ACRE OF ALFALFA

It will be noted that when cut twice yearly over a period of four years, alfalfa yielded two tons more per acre than when cut three times. This is largely due to winter killing, that follows cutting more than twice, for it will be noted that the yields for the first two years were practically the same. It will also be noted that the Grimm alfalfa yielded four tons more per acre than the common under both systems of cutting.

—Courtney Hoard's Dairyman.

Prevent Winter Losses of Alfalfa

The accompanying chart was prepared by L. F. Graber, of the Wisconsin College of Agriculture, to prove his claim that alfalfa will yield better when cut only twice a year and when hardy strains of seed are used.

For four years, Grimm and common alfalfa were cut twice and three times annually at the Wisconsin Experiment Station. At the end of the second year, the total yields were about the same, but after that the alfalfa cut three times became less and less productive. Winterkilling was very serious (especially with common) during the last two years where the alfalfa was cut three times annually. This is shown by decreased yields indicated by the dotted parts of the bars in the chart.

Apple Blossom Time Meeting of the Eastern Massachusetts Society of Beekeepers

Bees buzzing busily will be the attraction in the school orchards during the fruit-blooming period.

The Eastern Massachusetts Society of Beekeepers will hold the first of their four summer meetings in the orchard on Saturday afternoon, May 10 or May 17, at the height of the fruit bloom.

The weather will determine just when the bloom will be at its height.

RECORD OF VEGETABLES ACTUALLY HARVESTED FROM GARDEN DURING THE WEEK ENDING

	May 18 25	June 1 8 15 22 29	July 6 13 20 27	August 3 10 17 24 31	September 7 14 21 28	October 5 12 19 26
Radishes	* *	*		Seed sown April 4		
Spinach		* * * *		Seed sown April 4, 9, 24		
Bun, Onions		* * * * *		Sets planted April 5		
Lettuce		* * * * *		Seed sown April 5, Plants set May 1, 4		
Beet Greens		*		Seed sown April 15		
*Beets		* * * * *	* * * * *	* * * * *	* * * * *	
Peas		* * * *	* * * *	Seed sown April 5, 9, 24, May 2, 6		
Kohlrabi			* * *	Seed sown April 9		
Turnips			*	Seed sown April 9		
Cabbage	Plants set 5/1-6/22		* * * *	early		late *
Broccoli	Plants set May 1, 5		* * * *	* * * *		
Carrots	Seeds sown 4/15, 30-7/30		* * * *	* * * *	* * * *	* * *
Bush, S. Beans	Seeds sown 5/1, 8, 23-7/3, 16		* * *			
Cauliflower	Plants set 5/6-7/9		* * *	early		late
S. Squash	Seed sown May 13		* * *			
Tomatoes	Plants set 5/27-6/17		* * *	* * * *	* * * *	
Cucumbers	Seed sown May 23			* * *		
Sweet Corn	Seed sown 4/27, 5/8, 18 7/3			* * *	* * *	
Mature Onions	Sets planted April 19			* * * *	* * * *	
Peppers	Plants set May 29				* * * *	
W. Squash	Seed sown May 11, 18				* * * *	
Celery	Plants set June 20					* * *
Parsnips	Seed sown April 4					*

* Seed of beets sown April 15, 30, July 15, 27.

—A. L. Dacy.

HOME DEMONSTRATION AGENT SPRING DISHES

This is the time of year when the family needs tempting dishes to arouse a flagging appetite. Miss May E. Foley of Massachusetts Agricultural College at her lecture-demonstration given on Farmers' and Homemakers' Day showed just how to prepare these delicious and attractive spring dishes. We will give some of the recipes for the benefit of those who were not fortunate enough to hear Miss Foley.

Eggs-a-la-Rockefeller, Jr.

Toast four pieces of whole wheat or graham bread. Butter slightly. On each put a dropped egg, and over this 2 tablespoons of tomato and cheese sauce. Garnish with 1 or 2 slices of crisply fried bacon.

Tomato Sauce: Season 1 cup of tomato juice with celery salt, or salt and a few dried celery leaves, and a few drops of onion juice, if liked. Thicken with 2 tablespoons each of butter and flour creamed together. When thick and still hot, add a fourth cup of grated or finely diced American cheese. Stir until dissolved.

Curly Endive Salad

3 cups leaves cut into small pieces
6 tablespoons vinegar
3 small pieces of bacon
¼ teaspoon salt
2 teaspoons finely chopped onion

Cut bacon in small pieces and cook until crisp. Remove pieces of bacon. Add vinegar to fat and let come to a boil. Pour over endive, onion and salt. Stir well, and serve.

Spring Salad

1 cup finely shredded cabbage
1 cup grated or ground carrot
1 cup finely chopped or shredded raw spinach
1 tablespoon finely chopped onion or onion juice may be added, if liked
½ cup salad dressing

To crisp cabbage, put in colander or sieve, and run water through. Place in windy place for twenty minutes, stirring once or twice.

French dressing is good with this salad. Russian dressing may be used. Add to one-half cup mayonnaise, two tablespoons of thick chili sauce, and one tablespoon lemon juice. Five servings.

—Miss May E. Foley.

Meat Cutting Demonstration

On May 27th at 2 p. m. there will be a meat cutting demonstration at the School, to show how to use the less known cuts of meat to good advantage. Anyone who is interested is invited to attend.

ANNUAL MEETING of Extension Committees and Project Leaders at HATHORNE, MAY 20

W. R. Cole Gives Instruction to County Women

A course of three lessons on home canning to be given by Mr. W. R. Cole of Massachusetts Agricultural College started in Haverhill High School on April 11. The canning of greens was demonstrated. Twenty-four of the 50 women present enrolled for the entire course and will work with Mr. Cole at each lesson. These women will be glad to pass on this information to anyone in their communities on request.

The following women enrolled: Mrs. John Garrity, Mrs. Samuel George and Mrs. Ernest Gentleman of South Groveland, Mrs. Harrison Eaton, Mrs. J. J. Merchant and Mrs. John Burke of Amesbury, Mrs. William Duffy and Mrs. Wesley Colby of Rocks Village, Miss Catherine Sheehan and Miss Mary Donovan of Lawrence, Mrs. Walter Dean of Bradford, Mrs. Alice Webster, Mrs. Dora Emerson and Mrs. Viola Carmichael of Haverhill, Mrs. Edward Tucker, Mrs. Charles Watson and Mrs. Maurice Mansell of Georgetown, Miss Alice Lafond, Mrs. Emma Trickett and Mrs. Douglas Sparks of North Andover, Mrs. David Caldwell of South Byfield, Mrs. James Holmes of West Newbury, and Miss Edith Wilson and Mrs. Charles Spidell of Methuen.

The next lesson will be given on May 9 and all women interested are invited to attend.

Attractive Kitchens Give Courage for the Daily Tasks

"Attractive kitchens," says Mrs. Harriet J. Haynes, Home Management Specialist of Massachusetts Agricultural College, "gives the homemaker courage to perform her daily tasks." She says, "Anyone who has transformed a dark, gloomy kitchen into an attractive workroom knows this is true."

The thirty-five women who listened attentively to Mrs. Haynes' talk on "Beautifying the Kitchen" were surely given inspiration to brighten their kitchens and so lighten their tasks.

Similar talks will be given in Newburyport Y.W.C.A. on April 23, Saugus Grange Hall on April 23, and North Andover on May 15.

A 9,000 lb. Cow, A Flock of 50 Hens and a Profit of \$117.79

This is the record of two Andover 4-H Club boys chosen as Essex County delegates to Camp Gilbert.

Harvey Turner, Jr., aged 14 years, of Andover, was the most outstanding 4-H Club boy in the dairy project in Essex County during the year of 1929, and Robert Grant, aged 16 years, also of Andover, won the 1929 Garden Championship, according to a statement made by the County Club Agent. These two boys will have all their expenses paid for a week's stay at the 4-H Club camp.

Harvey Turner has been in club work three years, taking the forestry project the first year, poultry and forestry the second, and dairy the third. He has been very conscientious in his work every year, turning in a well-kept record at the end of every project. As he was unable to find four more boys to form a club, the poultry and dairy project had to be carried on alone on his father's farm. The first year with his poultry Harvey cleared nearly \$3.00 a bird before selling them for meat. He also won many prizes in the county egg-laying contest. Next he became interested in the dairy project and entered the milk production contest with two of his father's cows, one a pure-bred Holstein and the other a grade Jersey. Harvey was a persistent winner in the monthly milk production contest, receiving many bags of grain offered by a commercial grain dealer.

At the end of this year the record of the 2-year-old, pure-bred cow Viola, showed a total of 9591 pounds of milk and a labor return of \$232.75, and for the grade Jersey it showed a total of 8379 pounds of milk and a labor return of \$174.09. The Charles M. Cox Company of Boston offered three medals for the best dairy records in the state, and this 2-year-old purebred won third prize. Harvey is planning to purchase this cow from his father and exhibit her at the fairs.

Robert Grant started four years ago in the garden project and each year he has just been nosed out for the county championship. He was determined to win however, and this year he came through with a mighty fine record which showed \$177.79 labor return on his plot. Besides raising a fine garden and doing the marketing Robert was compelled to work out to help support the rest of the family.

Robert has found much enjoyment in exhibiting his products at the county fair. The second year as a garden club member he won five prizes and a total of \$5.50 in cash.

—Horace J. Shute.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 11

HATHORNE, MASS., MAY, 1930

NO. 5

High Lights of an Interesting Day

By EMMA TRUE THURLOW.

May the second, a party of fifty enjoyed an Essex County Extension Tour under the direction of Miss Marion P. Crawford, who was assisted by Mr. Francis C. Smith, County Agent and Mrs. Mary McIntire, County Clothing Assistant. The purpose of this tour was "To show the many influences which contribute to the making of Better Homes—beauty to recall to our minds the part played by the early settlers of Massachusetts toward laying the foundation for Better Homes in America." We would like to give you a picture of some of the interesting places we visited.

Our first call was at the Danvers home of Mr. Henry B. Morse, which is a modern colonial type house. The keynote of its attractiveness lies in its arrangement of rooms, with the livingroom and the diningroom in the rear and the kitchen in the front of the house. Thus one enjoys in privacy the beauty of lawns and gardens, as the greater proportion of the grounds are to the rear of the house, while the kitchen with its trade entrance is conveniently located near the street. A disappearing stairway gives access to the third floor. Truly this home has the charm of the colonial combined with the comforts of modern arrangements and labor-saving devices.

The Dean-Fuller house, built in 1718, has been restored by Mr. Francis S. Breed of Lynn. Formerly part of it had been used as a cattle-shed, but now it again discloses to light of day enormous fireplaces, beamed ceilings and walls. There is perfectly restored pine furniture to delight the eye, twelve Lincolnshire chairs and a "Sawback" table, once marred by milk cans, but under skillful hands has become a glorious addition to the beamed dining-room with its corner cupboard, revealing to us treasures of Sandwich glass. It is a home which had descended into degradation, yet mercifully has been returned to its former position as an American home.

At the Kelsey-Highlands Nurseries, in East Roxford, the offices are located in a hundred-year-old barn. The specialties here are rhododendrons, azaleas, and mountain laurel. The



THE DEAN-FULLER HOUSE, MIDDLETON

weather-vane of the barn is modeled along the lines of a sailfish Mr. Kelsey caught in Florida waters.

Our next stop was for luncheon, with the South Groveland women as hostesses. From there we passed to the pasteurization plant and attractive roadside stand of Mr. Robert Sawyer of Haverhill. Here we discovered how quickly milk can pass from 140 degrees to 70 degrees and be bottled without touch of hands. We all enjoyed the courtesies shown at the roadside stand.

At the Cherry Hill Nurseries of West Newbury, Mrs. George Thurlow opened her home to us and explained the overcoming of certain home management difficulties by installation of modern plumbing, kitchen cabinet, electric range, and electric refrigerator. We admired the beamed ceilings of the living rooms, the fireplaces, the Chippendale ladderback chairs, as well as a lovely old desk, Heppelwhite chairs and a real low-boy. Upstairs a canopy-top bed and a quilt 120 years old greeted us.

At the Toppan House of Old Newbury, built in 1649, we saw the hearthstones brought from England, and plaster made from lime found at Devils Den. This house is rented by the Sons and Daughters of the First Settlers of Newbury and has a very interesting collection.

At our last visit to the Spencer-Pierce House of Little's Lane, Old Newbury, the hostess, Miss Eliza Little, truly fascinated us with the history of the house. The architecture is of an early English type with a somewhat Spanish tendency in the hall. The two-sectioned door was set in an arched effect and the windows were in arched recesses. The hall, with its floor of squared brick, was papered with a quaint design of boats, haying scenes and taverns. Truly, the beautiful furniture, the pewter, and early colonial glass seem at home and a perfect complement to their charming background.

Pasture Day at M. A. C. Set for May 29

Quantity and quality are the main requirements of pasture land, and those interested in improving their permanent pastures will have a chance to see the work being done along this line on the experimental plots at the Massachusetts Agricultural College, Amherst, on May 29.

This date, from 10 A. M. to 4 P. M., has been set aside as Pasture Field Day at the College, according to R. W. Donaldson, extension agronomist.

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CALENDAR

COMING EVENTS AT SCHOOL

- May 20—County Extension Leaders Meeting.
- May 21—North Shore Nurses Association Meeting.
- May 23—Gloucester Woman's Club Field Day.
- May 24th—Junior High School Field Day.
- June 6th—Better Homes Day.
- June 14th—4-H Club Field Day.
- June 18th—Parents Day, Homemaking Department.

Annual Junior Field Day

The Essex County Agricultural School will be hosts to the graduating class from the junior high schools or highest grammar grades where no junior high is conducted, on Saturday, May 24th, at the School. A very complete program has been arranged, including visits to the various departments of the Farm, a "horribles" parade, contests and athletic events. It is planned to make a day, extending from 9:30 A. M. to 4:30 P. M., very complete and worthwhile. Special book prizes will be given for best essays describing the day's outing. Each principal is supplied with a detailed program. Why not spend a profitable day at your county agricultural school?

Parents' Day Wednesday, June 18th, 1930

Parents' Day will be observed, Wednesday, June 18th, by the Homemaking Department. The students of that department will act as hostesses on that day to their parents and friends.

At 10.30 in the morning, trips will be organized to visit points of inter-

est about the farm. This will give an opportunity to see exhibits of work done by the students.

The lunch hour will be from 1.00 to 1.30. Each guest is requested to provide her own box lunch. There will be hot coffee and punch served by the students.

The speaker for the afternoon program will be Mrs. Ruth Eggleston Owen, her subject being "The Home, the Foundation Stone." Since girlhood Mrs. Owen has been a constant worker for boys and girls in their teens. She is popularly called "Mother E." by the girls with whom she has worked. Margaret Eggleston Owen is widely known as a lecturer and story teller to the girls of New England high schools and also to women's clubs.

The afternoon program also includes a demonstration in the selection and use of color in costumes, with students acting as models, and a demonstration of cake-making by girls from the food classes.

—Grace A. Gilkey.

Meat Cutting Demonstrations

How can I get more meat for my meat dollar? These questions will be discussed at a series of meetings arranged by the Essex County Extension Service, co-operating with the Massachusetts Agricultural College and the National Live Stock and Meat Board.

Professor V. A. Rice, head of the Department of Animal Husbandry at the Massachusetts Agricultural College, will discuss the value of unused and little used cuts of lamb, particularly the forecuts, and show how these can be so cooked and handled that they will be edible. He will distribute desirable recipes showing the housewife how to use these various cuts.

Max Cullen, of the National Live Stock and Meat Board, Chicago, will have two lambs on exhibition and will explain by charts and diagrams the advantages of these various cuts of lamb, and will actually cut up one of the carcasses, showing how to do it.

SCHEDULE OF MEETINGS

Monday, May 26, 2:00 p. m.—City Hall, Newburyport. Joint meeting for both retailers and the consuming public.

Monday, May 26, 7.30 p. m.—Russell Hall, Y. M. C. A. Building, Lawrence. Joint meeting.

Tuesday, May 27, 2:00 p. m.—Essex County Agricultural School, Hathorne. Meeting for housewives and the consuming public.

Tuesday, May 27, 7.30 p. m.—Essex County Agricultural School, Hathorne. Meeting for meat dealers only.

Hey, Hey, Farmer Gray

"Hey, hey," says Farmer Gray, one fine day in the month of May, "we're going to take our vacation with pay."

"Say, say," jeered Farmer Gray, "how do you get that way and still make hay?"

"That's not hard. I'll let you know how to have a good time and still make some dough. Just pack your grip and take your wife. Plan to be gone for at least four nights. Have plenty of oil and lots of water, fill up with gas, then stand on the starter. Then head 'er east or head 'er west, and after you get there they'll do the rest."

"Just can the rhyme," sings Farmer Brown, "and tell us straight how to get ten bucks where you only had eight."

"Well, here's the low-down," says Farmer Gray. "The good wife and I are taking in Farm and Home Week at the Massachusetts Agricultural College at Amherst again this year. I understand that this year's program is set for the four days, July 29, 30, 31, and August 1. They have a four-day program for housewives, and programs for fruit growers, dairymen, poultrymen, beekeepers, livestock men, and others.

"We were there last year and we had such a good time and got so much out of the meetings that we consider it a vacation with pay, and you can be darn sure that we are going again this year."

M. A. C. Radio Forum Starts Again June 1

Starting June 1, the weekly radio broadcast from the Massachusetts Agricultural College over Stations WBZ and WEZA, instead of being in dialogue form will be on a strictly forum basis; namely, questions and answers, according to the radio man at the College.

The time of the broadcasts is also being changed. Instead of Thursday evening, the new broadcasts will go on the air every Monday noon at 1:15 P. M., daylight saving time.

In order to keep timely subjects on the air, the radio man promises to answer all questions which are received by the preceding Wednesday. In other words, any question which gets to the radio man by Wednesday will be answered the following Monday. This prompt answering of questions will keep the radio forum strictly up to date and will keep timely subjects on the air.

All questions should be addressed to the Radio Man, M. A. C., Amherst, Mass.

Old-Fashioned Gardens

What kind of a garden shall I make around my little Cape Cod cottage, back of the two-story Colonial house, or surrounding the wings of the low, rambling, half-timber English Cottage? These are questions that arise many times, for nearly everybody feels that just a grass plot with red Geraniums is not sufficient. If you like antiques, if you remember the homelike atmosphere of the farm garden, old-fashioned gardens will attract you.

What are their outstanding features? First the fences: nice white picket or rough stone, with a rambling rose over an arched gateway, a Bittersweet, a Woodbine, and a Honeysuckle.

Then the simplicity of the design: a path of flagstones, with long narrow strips or small, square beds of flowers on both sides. On one side beyond that, the vegetable garden, with some beds for herbs: the Blue Borage, the Sorrel, Thyme, Mint and Marjoram, Sage and Catnip, Rue and Caraway, Dill and Fennel. On the other side, the lawn, in spring is spotted by Crocus and Snowdrop.

The little flower beds are edged with Dusty Miller or Grass Pinks; they contain many annuals like Love-in-a-mist, Love-lies-bleeding, Balsam, Marigold, Venus Looking-glass, Cornflower, Snapdragon, Pinks, Larkspur, Malope, and Feverfew. Here and there is a big patch of climbing Morning Glory or rosy Malope. Fragrant Stocks and Mignonettes, big double pink Poppies, tall Sunflowers and Zinnias in many hues are abundant. Other beds are devoted to perennials, like Yarrow and Monks-hood, Columbine and Sweet William, Iris, Wallflower and Canterbury Bells, Jacob's Ladder, Carnation and Forget-me-not, and Hollyhock, Dittany, Honesty and Jerusalem Cross. Dark red Peonies and the white Madonna Lily have a nice moist corner. All are treated as individuals, not as clumps of color.

In the background is the little tool shed under the apple tree; the kitchen door is shaded by the grape arbor, homemade or rough beams.

Around the garden, near the fence or against it, some tall Red Cedars or Arbor-vitae, a Birch and a Silver-leaved Poplar have grown up. Between them the Cabbage Rose and the Moss Rose run nearly wild, the Lilacs form big bushes, and the Quince shows its fragrant yellow fruits. Near the shed, in back, are rows of currant and gooseberry bushes.

From Garden Gossip Leaflets
Better Homes in America.

May Summary Meetings in Children's Clothes Project

An enthusiastic group of young mothers, together with many small children, met for the last meeting in the Children's Clothes Project in the North Andover Health Center, May 1. In the observance of Child Health Day, Dr. Clarence Bonner of the Danvers State Hospital gave a talk full of helpful suggestions to the mothers on "Mental Hygiene."

Slides on "Food Makes the Difference" were shown by the Home Demonstration Agent.

The nutrition group served real Extension sandwiches.

Many attractive dresses and coats were shown by the women who have very successfully completed this project under the instruction of Mrs. Mary McIntire, County Clothing Instructor.

On May 21, another group under project leaders will conduct their last meeting in the Newburyport Y. W. C. A. Groups from Boxford, Amesbury, South Ryfield, Newbury, Salisbury and West Newbury will have charge of this meeting. Mrs. Ruth D. Morley, State Specialist in Child Guidance, will speak to the mothers on "Avoiding Dressing Difficulties with Children."

A Short Cut to Bordeaux

THE INSTANT METHOD

To make a good Bordeaux Mixture by this method, the copper sulphate must be obtained in a finely powdered form. This powdered copper sulphate is known to the trade as "snow blue vitriol."

To make 50 gallons of Bordeaux Mixture of the "4-1-50" formula by this method, proceed as follows: While water is running into the spray tank, place 4 pounds of chemical hydrated lime into the tank. While putting in the lime, stir continuously; next add to the lime water in the tank 4 pounds of powdered copper sulphate, still stirring; lastly add enough water to bring up the volume to 50 gallons. The ingredients should be well mixed and the copper sulphate thoroughly dissolved before using this mixture for spraying. Smaller quantities of Bordeaux mixture may be made by using smaller amounts, but in the same proportions. The lime will probably cost from 75c to \$1.00 per 100 pounds. The finely ground copper sulphate costing from 10c to 15c per pound, depending upon the quantity bought.

—E. E. Metcalf.

SUMMARY OF WEATHER OBSERVATIONS

January - April, 1930

	Jan.	Feb.	March	April
Maximum Temperature	62 (8th)	64 (20th)	58 (10th)	76 (14th)
Minimum Temperature	4 (27th)	-8 (17th)	14 (4th)	22 (10th)
Mean Daily Temperature	26.3	28.8	35.3	44.4
Five-year average, '25-'29	25.1	27.2	34.6	44.2
Greatest daily range	26°	34°	29°	39°
Least daily range	3°	4°	4°	6°
Precipitation	2.49"	1.76"	3.16"	1.75"
Five-year average, '25-'29	2.83"	3.69"	3.14"	3.68"
Total to May 1	....	....	....	9.16"
Deficiency to May 1	....	....	....	-4.18"
Ave. relative humidity 8 a. m.	80.5%	76.2%	72.0%	69.0%
No. days on which rain fell	13	9	10	5
No. clear days	10	13	10	11
No. partly cloudy days	6	7	13	11
No. cloudy days	15	8	8	8
Total hours sunshine	118.5	157.0	200	233.5
Per cent sunshine	40.3%	53.2%	54.1%	58.2%
Total to May 1	....	....	....	709.0
Four-year average, '26-'29	....	....	....	735.0

The year 1930 started off with high humidity and a low percentage of sunshine, a condition which was reflected at the time to a marked degree in the poultryman's problems. Since then, however, the humidity has greatly decreased, which, with the low rainfall, has brought about the present serious fire hazard. We are now more than four inches below the rainfall average of the past five years. February was a month of unusual extremes, the maximum being 10 degrees higher and the minimum four degrees lower than had previously been recorded at the school. The year so far has accumulated about 114 degrees excess temperature as compared with the average for five years from 1925-1929 inclusive. The total amount of sunshine, due to the low figure for January, is still somewhat below the four-year average 1926-1929.

—Harold A. Mstrom.

BETTER HOMES DAY FRIDAY JUNE 6

...AT...

Essex Agricultural School HATHORNE

Dr. Carolina Hedger to Speak Better Homes Day

KEY NOTE FOR THE DAY, "THE CHILD IN THE HOME"

To announce that Doctor Hedger is to be the speaker for Better Homes Day is sufficient to make Essex County women mark June 6 on their calendars and plan to spend that day at the Essex County Agricultural School.

Doctor Hedger comes from the Elizabeth McCormick Memorial of Chicago and is no stranger to us. Those who heard her four years ago still remember her lecture on "Positive Health." Carrying out the general theme for the day, "The Child in the Home," Doctor Hedger will speak in the morning on "What the Community Owes the Child," and in the afternoon on "The New Era of the Child."

The morning program begins at 10:15 with a short business meeting and a half-hour of community singing, led by a trained leader. After Doctor Hedger's lecture, 4-H Club girls will stage a style show, wearing dresses entered in the Cotton Dress Contests.

The afternoon program, beginning at 1:45, will include a short musical program, followed by Doctor Hedger's address.

The exhibits will emphasize the general theme for the day. A Child's Play Room will be equipped by the women who have been carrying on the Child Guidance project. Suitable and attractive clothing for young children, made in community groups who have been instructed by project leaders, will be shown.

An Extension group from Lynnfield Centre will be hostesses in the Home Nursing room, while the Danvers group will have charge of the Nutrition room.

Those attending should bring a basket lunch. During the noon hour from 12:30 to 1:45, ice cream, milk and coffee may be purchased on the campus.

Young children will be cared for by students of the Homemaking Department.

—Marion P. Crawford.



ARTHUR GORDON

Wins State Honors in Garden Club

Arthur Gordon of Rowley has been chosen as the most outstanding 4-H Club member in the garden club project in Massachusetts during the year of 1929, according to a statement made by the State Club Leader, George L. Farley.

Ten years ago this young man enrolled in the 4-H garden club. In 1926 he was chosen as the Essex County delegate to Camp Gilbert. Returning, he entered the Essex County Agricultural School. He spent four very successful years here, winning many of the prizes.

Arthur became interested in judging contests while at the School, and as he was a 4-H club member, he took advantage of every opportunity to judge. At his last judging contest, which was in fruit, he won the highest individual prize with a perfect score.

4-H club work played an important part in Arthur's life. In fact, he recently stated that he could lay all of his success in life to belonging to the 4-H Club.

This young man not only won the honor of being the most outstanding garden club member and a trip to Camp Gilbert, but he also won a combination Planet Jr. seeder and cultivator, offered to all state garden club winners by the S. L. Allen Company of Philadelphia.

Arthur has one more year of 4-H club work before he will be twenty-one, which is the age limit. He will be the only boy in Essex County to have completed eleven years of 4-H Club work.

Cotton Dress Contests

The cotton dress contests are to be held on Better Homes Day, June 6.

The rules of the contest are:

Rules for County Dress Contest.

A. Those Eligible.

Class I-a. Open to girls 12 years of age or under. School dress to be made with kimono or raglan sleeves, or sleeveless.

Class I-b. Open to girls over 12 years of age. School dress to be made with set-in sleeves. Ensembles are included in this class.

Class II-a. Open to girls who were in the 1929 school dress contest and to those girls who are taking Program D or more advanced programs. Party dress of formal or informal type.

B. Requirements for the Dresses.

1. Dresses must be made entirely by contestant. They should be seen by the local leader during the process of construction.

2. All dresses are to be made of cotton fabrics. No rayon accepted.

3. Style of dress should be suited to the purpose of the dress.

4. Those entering party dress contest must make and exhibit slips also. Slips do not necessarily have to be made of cotton material.

5. Dresses must be accompanied by a complete itemized account of cost. In the case of party dresses cost of slip must also be included.

C. Judging.

1. Dresses must be in county office on June 4. Party dresses must be accompanied by slip.

2. Girls must be present on Better Homes Day, June 6, to wear dresses for judging. Suitability of style, material, trimmings, fit of dress, becomingness of color and design, choice of accessories, shoes and stockings, posture, personal neatness and workmanship will be considered in the judging.

D. Prizes.

1. Prizes will be awarded to those scoring highest in the three classes. Four from each class will then compete in the Sectional Contest.

Apple Blossom Time Meeting of Beekeepers and Fruit Growers

Saturday, May 10th, the Essex County Agricultural School was host to the Eastern Massachusetts Society of Beekeepers, the North Essex Society of Beekeepers, and the fruit growers at large.

ESSEX FARMER AND HOMEMAKER

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NO. 6

Pleasant Little Garden Combines Old With New

In Wenham, just off the Old Bay Road, on land which belonged to the Rev. John Fisk in 1644, is the Wenham Exchange and Tea House, fostered by the Village Improvement Society. In the angle which the ell makes with the house, screened from the street by Arborvitae, nestles a pleasant little garden, a new-old garden—the Memory Garden pictured here. Over the way is the Claflin-Richards House, built before 1664, home of the Wenham Historical Society (another branch of the Village Improvement Society) and its ancient trees can be seen from within the garden at the Tea House. In the street are tall Maples, and to the west arched Elms and Locusts, permitting vistas of quiet meadows and woodlands.

The Garden is part of the house. Through the western door you look down the principal path to a stone seat. In front of the seat is a pool, semi-circular in form, and a fountain sprays the Lily-pads. The path is of flagstones, set flush, with clipped grass between. The seat is broad, low and deep, cushioned in part with Veronica. The high back is overhung with Goldentuft and Cotoneaster, while directly in its center and a little above the seat, from a crevice stands out a thrifty Houseleek and its offspring. Two Retinasporas frame the seat and bid you welcome. A stone pile furnished the happy thought and the material for the seat, and a day's work put it together.

Behind the seat is a rockery—a little surprise held in store for anyone who follows the stepping-stones that circle into this garden recess. Bordered with iris and narcissi is this pathway. From its edge Euonymus sweeps up the face of the stones to meet the sprawling Cotoneaster, while in another place Moneywort flows out over the flagstones. In the soil pockets of the rockery grow Columbine and Sedums. There are Funkias here and there, and in the farthestmost corner Obedience challenges intrusion by less timid plants. The garden seat, its rockery, and its pool and fountain, are altogether the dominating feature of the garden.

You may enter the garden from the street by way of a latched gate in a picketed fence and a bit of lawn. You slip through an opening in the Arborvitae enclosure—an entrance quite



MEMORY GARDEN AT THE WENHAM EXCHANGE, WENHAM, MASSACHUSETTS

unadorned—and find yourself within the Memory Garden. Close beside you are Peonies and yellow Daylilies and Plantainlilies, one of each to the right and left. You catch a glimpse of the stone seat, pool and fountain. You notice, perhaps for the first time, the inviting wooden bench under a Rose arbor set against the ell between windows. The windows are overspread by trellises, painted white, the one in the sun like the arbor supporting a climbing Rose, the other in the shady angle of the house playing host to swaying Hollyhocks. You hear birds in the Locusts and feel the sunshine on your back.

A strip of grass is under your feet, parallel with the main axis of the garden and separated from it by a narrow bed filled with hardy perennials supplemented by Verbenas, Petunias, and Ageratum, and edged with Forget-me-nots and Lobelias. In the borders are Blue Alkanets, MalloWS, Cosmos, Blue Thistles, Lupines, Baby-breath, Larkspur, Monkshood, Sweet William, Love-in-a-mist, Petunias pink and white, Coral-bells, Garden Pinks, Goldbanded Lilies, Plantainlilies, Daylilies, Phlox, Peonies, Tulips, Stocks, Bleedinghearts, Obedience, Violets, Sedums, Heather, Canterbury Bells, Cranesbill, Gill-over-the-ground, Tunicia, Forget-me-nots, and Ribbon Grass. In one corner are gay Pansies, in another pert little Johnny-jump-ups. From under a clump of Obedience-plant peers dainty Saponaria. Cosmos and Larkspurs and Canterbury-bells rise

over against the Thujas. Lacelike Nigella and foamy Babysbreath adorn the borders.

The Garden design is one of ten submitted in competition for a considerable prize. The Garden is only 35 by 44 and has required careful planning to insure succession of bloom, and great restraint lest its borders and beds be cluttered. It is open to visitors throughout the summer, and numerous callers find it an agreeable loitering place before and after tea.

The world rolls by over the Old Bay Road, but in the Memory Garden at the Wenham Exchange one sits in the sun and recalls that many good workers in the Village Improvement Society are memorialized by this Garden.

—H. Linwood White.

Junior High Day

Five hundred boys and girls attended the annual field day held at this School on May 24 for grammar and junior high school graduates. The horribles parade and the kite flying contest, two new features added to the program, created considerable interest. Agricultural contests, educational exhibits, and tours of the farm and buildings gave the young folks much to think about.

In the athletic contests, held during the afternoon, several former records were broken. Twenty different schools from all parts of the county were represented in these events, with about 250 contestants.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

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CALENDAR

- June 25—Essex County Board of Trade Field Trip and Visit to School
June 26—Poultry Unit Courses—Reunion at Hathorne.
July 9—Pomona Grange Picnic at Topsfield Fair Grounds.
July 18—Pasture and Dairymen's Auto Tour, Essex County.
July 28—Aug. 1—Vocational Agricultural Teachers' Conference at Amherst.
July 29-Aug. 1—Farm & Home Week at Amherst.
August 5—Essex County Fruit Growers Association Meeting at Hathorne.
August 6—Market Garden Field Day, Waltham.

Fruit Meeting August 5

Fruit men of Essex County will be pleased to note the date set for the Annual Meeting of fruit growers to be held at the Aggie School. The nursery contains many new varieties fruiting for the first time. The orchard with various kinds of cover crops, the general orchard program, the traps for catching the various flies and insects—all will prove interesting.

Young Farmer's Organize

The first convention of the Massachusetts Young Farmers' Association was held at the Massachusetts Agricultural College on May 2, 1930. The Essex Chapter, located at the Essex County Agricultural School, sent two delegates, Lawrence C. Westcott of Melrose and Harold Bowen of Ipswich.

A state constitution was presented and with few changes was adopted by the delegates present. The follow-

ing state officers were elected for the year:

President, A. Philip Erick, Bristol County Agricultural School; Vice-President, Lawrence C. Westcott, Essex County Agricultural School; Secretary, Frederick N. Andrews, Weymouth High School; Treasurer, Clifford Hall, Norfolk County Agricultural School; Reporter, Edward Cutting, Worcester High School; Advisor, Mr. R. W. Stimson, State Department of Education.

It was voted to hold a state meeting at least once each year.

HAROLD BOWEN, *Reporter.*

Alumni Notes

AGRICULTURAL DEPARTMENT

BARNABY, G. STEWART, '18, 11 Harvard Street, Brookline, Florist, in business for himself.

CURIAN, JAMES H., '24, 43 High St., Amherst, Senior, Stockbridge School of Agriculture, M. A. C. Major, Floriculture.

DANFORTH, ASHTON G., '28, National Gardens, Florida. Nursery stock salesman for Florida Bulb and Nursery Co., covering Daytona and Ormond Beaches.

DEQUOY, STANLEY W., '17, Woodsville, Haverhill, N. H. Fourth year as 4-H Club leader in Grafton County, one of the two largest counties in the state. It includes the largest dairy towns in the state and many scenic wonders.

DOW, WILLIAM C., '18, 22 Gardner St., Lynn. Employed by Knute Swanson Construction Co. Married and has one daughter, 15 months old.

DOWDALL, ERNEST L., '27, Canton Avenue, Readville. Herdsman on the Mrs. Roger Wolcott, Sr., Estate, Canton Avenue, Readville.

FREEDMAN, SAUL, '17, 30 East 40th St., New York, N. Y. Practicing surgery in New York.

FRISBEE, RALPH T., '19, Whitehall Road, Amesbury. Manager of Smith Grain Co. Married and has one daughter.

PHIPPS, CARL D., '21, 16 Felton St., Hudson. Employed in Fruit Department, Chedeco Farm, Berlin, Mo.
STANTON, CARL, '16, Peterborough, N. H. Landscape architect. Lecturer on garden topics. Opening branch office in New York City.

STOWELL, WILLIAM, '25, 604 Western Avenue, Lynn. Engaged to Miss Audrey Brackett of Lynn on June 13, 1929. No date has been set for the wedding.

VAUGHAN, A. DONALD, '26, Box 73, North Pomfret, Vermont. Testing for Pomfret Jersey Breeders' Herd Improvement Association, also Advance Registry.

WALKER, FRED H., JR., '27, Box 291, Manhattan, Kansas. Sophomore at Kansas State Agricultural College, and works for the Entomological Department.

HALE, NATHAN S., '28, Rowley. Student at M. A. C. Class of '32.

BREDBURY, HOWARD, '29, of Andover, is now employed at Broadway Farm, Winsted, Conn.

HOMEMAKING DEPARTMENT

BOUSLEY, LUCINDA D., '16, 5 Fairmount Street, Salem. Private nursing.

BRANDER, LOIS A., '29, 30 Prospect Street, Saugus. Laboratory Assistant at Essex County Agricultural School.

DOW, MARION H., '25, 605 Chestnut Street, Lynn. With Gibbs Bros., Florists, in Lynn.

EASTMAN, HAZEL F., '24, 164 Rowler Street, East Lynn. Teaching at Homemaking School, Quincy.

GLAVIN, MARJORIE, '21, (Mrs. K. F. Briggs) 48 Pearl Street, Amesbury. Married, two sons.

GREENLEAF, PHYLLIS, '26, (Mrs. Phyllis Ellis) 15 Sherman St., Lexington. Housekeeper. One daughter.

MONSELL, IDA, '29, (Mrs. George H. Dalrymple), 37A South 10th St., Newark, N. J. Married. Putting into practice things learned at Aggie.

WILKINS, GERTRUDE, '22, (Mrs. Clarence J. Castle) High Street, Topsfield. Housewife, one son.

TORSEN, GRACE V., '29, 38 Gardner St., Lynn. Laboratory Assistant at Essex County Agricultural School.

ISRAEL, GERTRUDE, '21, (Mrs. Paul E. Bouthillier) Kings Park, Long Island, N. Y. Married, one son.

RICE, ELLEN, '16. Visited the School recently. Lives on Neck Road, Lancaster, Mass. Is operating a Jam Kitchen there. Has also done considerable work supervising school or vacation gardens.

School Notes

C. M. Stearns, instructor in Vegetable Gardening and Secretary-Treasurer of the Massachusetts Roadside Stand Association, addressed the radio audience on June 3rd over station WBZ. His subject was "Asparagus," from the viewpoint of both the consumer and the producer. Instructor Stearns is scheduled to speak on June 25th, July 10th and August 4th at 1.15 P. M.

Instructors O. E. Carlson, J. F. Gallant and K. W. Forman will register for advanced courses at the M. A. C. summer school.

Instructor Henry P. Thurlow is chairman of the Danvers Tercentenary Committee.

Let Us Spray

This is the time of year when we are forcibly reminded that the welfare and happiness of all mankind depends to a large extent upon our success in our fight against myriads of pesky insect pests.

The average person knows very little about "bugs," and cares less. If we consider, however, that it has been estimated that there are ten million different kinds of insects in the world and that the females of many of them can lay 400 eggs apiece in one short season, we will become aware that the problem of bug-ology is a real one.

An eminent government entomologist has estimated that one-tenth of all things artificially grown is destroyed by insects. They feed on everything—everything that is useful to man. Even such recent inventions as the aeroplanes have insect pests attacking them. Thus recently it was brought out that there is a kind of wood-borer infesting the aeroplane wings, destroying them gradually. Telephone and telegraph poles are also infested. Indeed, the very insulating lead of the wire coils is burrowed into by some species of insects. The cotton in the South is attacked by the boll-weevil, and after whatever the insects do not devour has been made into clothes, we have the clothes-moths taking their toll by making our coats and pants look like formidable sieves. The insects are not yet through with this cotton product, however, for when we have discarded our old togs and the ragman has disposed of them to some carpet manufacturer, the carpets made from these rags are infested by the carpet beetle.

In the struggle for existence on the earth, the insects seem to have the upper hand. Many of the vertebrates have become extinct in the struggle for survival and, indeed, man too is thought to be doomed; but not so with the insects. Their very smallness seems to be their strength and salvation. The insects will, no doubt, remain on earth long after man is gone. Dr. H. J. Holland says:

"When the moon shall have faded out and the sun shall shine at noon-day a dull cherry-red, and the seas shall be frozen over; when all cities shall long have been dead and crumbled into dust, and all life shall be on the verge of extinction on this globe; then on a bit of lichen, growing on the bald rocks beside the eternal snows of Panama, shall be seated a tiny insect, preening its antennae in the glow of the worn-out sun, representing the sole survival of animal life on this our earth,—a melancholy 'bug!'"

Much has been done during the past few years to control the insects by the use of chemical sprays, but far too little has been accomplished. It behooves us to take greater active interest in this insect control, or we shall literally be eaten out of house and home.

Let us Spray.

—O. E. Carlson.

Lawn Fertilization

The U. S. Department of Agriculture shows by recent experiments that bone meal does not give the best results on lawns. Three parts of cottonseed meal to one part ammonium sulphate gave the best results of all. Apply in spring or early fall at the rate of 12 to 15 pounds to 1,000 square feet of space.

—F. C. S.

Five herds in the Essex County Dairy Herd Improvement Association are under the Breed Herd Test plan. They are:

Holsteins—Harvey Turner, Andover, Gilbert Tucker, West Newbury; Charney Gleason, Haverhill; Edward Shattuck, Andover.

Ayrshires—Winthrop Gleason, Haverhill.

Guernseys—Appleton Farms, Ipswich.

Farm-Home Week at Amherst July 29 to Aug. 1 Inclusive

Twelve programs and approximately one hundred state and national authorities or specialists are scheduled for the annual Farm and Home Week program at the Massachusetts Agricultural College, Amherst, which is to be held July 29, 30, 31, and Aug. 1.

The program may be likened to a huge 12-ring show, the only difference being that there is no admission or parking charge; there is plenty of space on the campus for camping or picnic parties, and for those who do not bring lunch there is a cafeteria which furnishes reasonable meals. A nursery is also provided for those parents who wish to bring their children.

The programs which are scheduled for the meeting include homemaking, fruit growing, flower gardens, home canning, tobacco and onions, beekeeping, poultry, sheep, dairy, cash crops, agricultural engineering, and lawns.

Complete information and programs may be obtained by writing the Extension Service, M. A. C., Amherst, Mass.

Pasture Demonstrations

The methods of improving pastures are being demonstrated on the following farms in Essex County. Those interested should plan to attend the auto tour, July 15th, or call at the nearest demonstration and talk with the owner.

B. F. Sargent, of Amesbury, Alexander Pike of Salisbury, Newton Abbott of Andover, John Henderson of Andover, George Livingston of Andover, F. L. Gowan of West Newbury, L. G. Dodge of West Newbury, Whitcomb Farm, Haverhill, Zeno Elwell of Essex, Malcolm Shaw of Essex, S. S. Bateholder of Andover, Melville Grey of Wenham, Conrad Tronerud of Topsfield, Frank Newhall of Lynnfield, Chester D. Abbott of Andover, M. M. Converse of Andover, Judge L. S. Cox of Methuen, John Newhall of Newburyport, Mrs. Ellen Kelliher of Newburyport, John E. Nelson of Gloucester, Argilla Stock Farm of Ipswich, Silas Little of Newbury, J. L. Stewart of Amesbury, G. W. Sargent's Sons of Merrimac, Meredith Farm of Topsfield, and the Essex County Agricultural School at Hathorne.

90% Clean Fruit Club

The men listed below have signed up and are trying to grow apples that will be 90 per cent clean: F. K. McIntire of West Peabody, Walter Brown of West Peabody, Francis R. Appleton of Ipswich, S. H. Wellman of Topsfield, Essex County Agricultural School, Hathorne, Benjamin Duce of North Andover, Roland Harris of North Andover, Charles Jones of Amesbury, Howard Marshall of Haverhill, Dr. Eugene Crockett of Ipswich, Arthur Usher of Danvers, Elwood Roberts of Danvers, R. N. C. Barnes of Andover, Leon Ellis of Lynn, W. A. Palmeter of West Peabody, Benjamin Pearson, Jr., of Ryfield, Roy Buxton of Amesbury, R. A. Thomas of Lynnfield Center, T. A. Nolan of West Newbury. A total of eighteen. We hope they make it.

—F. C. S.

Cultivate Your Garden

It pays to keep your cultivator, shove-hoe, hand-weeder, or what not, working to save a few backaches later on. Weeds grow faster than most vegetable seedlings and draw upon the moisture and plant food that should be going into plant growth. These obnoxious weeds should be killed when they are small by means of the cultivator or shove-hoe and not allowed to grow until they have become large and require much hand work. Why not say that an hour spent in cultivating is worth ten hours of hand weeding?

—Carlton M. Stearns.

New Canning Class at Farm and Home Week

Something new in the form of a program for homemakers is being offered by the department of food preservation at the Massachusetts Agricultural College at the time of the annual Farm and Home Week program which comes July 29, 30, 31 and August 1, according to W. R. Cole, extension specialist in food preservation.

Furnishing everything, from aprons up, the department will give a three-hour laboratory class in canning, jam making and jelly making to the first 120 women who make written application with the department.

Thursday, July 31 is the date set for this new class, which will be divided into two sections of 60 each, one in the forenoon and one in the afternoon, the number of each class being limited to 60 due to the capacity of the laboratory. Two of the three hours will be given over to the actual work of canning and jelly and jam making, while the third hour will be a round-table discussion of questions brought in by the women.

In order to make proper preparation, it will be necessary, as far as possible, says Mr. Cole, to have advanced registration, and the first 120 women to sign up will be given the opportunity to take this laboratory work. If you wish to register for these groups, write to W. R. Cole, M. A. C., Amherst, Mass., before July 10. State your preference for morning or afternoon class.

Over 400 Interested Women Heard Dr. Hedger on Better Homes Day, June 6

This year the Better Homes Day exhibits and program emphasized "The Child and Its Care." Dr. Caroline Hedger, who is connected with the Elizabeth McCormick Memorial of Chicago and is nationally known for her work with children, delivered two splendid lectures during the day. The keynote of Doctor Hedger's addresses was that we must raise strong and healthy children if the future of the nation is to be secure.

The morning program was opened by Mrs. Earl Bessom of Marblehead, Chairman of the Advisory Council, who extended greetings to members of the extension groups and their friends. The Home Demonstration Agent gave a resume of extension goals reached in 1929-1930. This was followed by a short period of community singing, led by Miss Wilma

Jeppson of Columbia University. Miss Jeppson kept her audience in excellent humor, and at the same time succeeded admirably in teaching several new songs. The program closed with a 4-H Club Cotton Dress Style Show, the result of a contest conducted by Horace J. Shute, County Club Agent.

After the basket luncheon, which was enjoyed on the spacious lawns, the afternoon program opened with over 400 in attendance. Director F. A. Smith welcomed the visitors and Mrs. Annette T. Herr, State Home Demonstration Leader, extended greetings from the State Extension Service. Miss Jeppson gave a demonstration of Music Appreciation, which was followed by Doctor Hedger, who spoke on "The New Era of the Child." A question period with Doctor Hedger concluded a most enlightening day for those interested in child guidance and welfare.

EXHIBITS

Women from different communities prepared interesting exhibits. They consisted of Child Feeding, Child Care, Children's Clothing, and a Play Laboratory.

About forty visiting children were taken care of during the day in a shady spot where a sand-box and toys were provided for their amusement. Students from the Homemaking Department of the School had charge of the children, leaving the parents free to study the exhibits and enjoy the program.

To all parents in attendance it was a day well spent.

Date Ice Box Cake

The following recipe was served at the Annual Meeting in May of Community Chairmen and Project Leaders. So many of those inattentive desired the recipe that we take pleasure in passing it on to others.

Recipe

- 1/2 lb. graham crackers
- 1 pkg. dates
- 1/4 cup lemon juice
- 1/4 teaspoon salt
- 1/4 lb. marshmallows.
- 1/2 cup walnuts
- 1 cup cream

Crush graham crackers, cut dates in eighths. Pour lemon juice over dates, add salt, cut marshmallows into quarters. Chop nut meats. Whip cream, fold in the dates, nuts, marshmallows, also graham crackers, reserving 1/4 cup. Sprinkle these on sheet of waxed paper, turn mixture onto paper and shape in a long roll three inches in diameter. Cover with crumbs, wrap in wax paper and place in refrigerator 10 hours. Cut in 1/2 inch slices and serve with cream.

Club Girl's Letter to Assistant State Leader

Dear Miss Doane:

I thought you might like to know about the supper our cooking club, The Worthwhile Girls, served to a few of our high school teachers a short while ago. There were twelve of us, four guests, Miss Parker, and we club members. Instead of having one long table we had three bridge tables, four seated at each one. This gave sort of a friendly touch, besides making it easy for everyone to join in the conversation. We chose yellow and green, the colors of springtime, for our color scheme. The centerpieces at each table were yellow jonquils and the favors were little baskets filled with gumdrops. The place-cards were on green crepe-paper ribbons which were pasted to the baskets. Green was also furnished in the green and white napkins.

Our menu conformed with the color scheme, too. We had potatoes with cream of spinach sauce, meat loaf, mint jelly, graham rolls, and orange-flavored cookies. It made an attractive and tempting menu, but it was quite simple and inexpensive. The first course was all ready on the tables when we sat down, but the question of later serving was settled by having one girl waitress for her table.

After the supper, the tables and chairs were pushed back and we were ready for the games. The first one was an adjective game. One of the girls had already written a short skit about the supper, leaving a blank before every noun. Each one of us in turn gave an adjective while Louise wrote them in the blanks. We all had many hearty laughs over the result, which was certainly amusing. In the next part of the program the teachers had also a chance to use their ingenuity. We club members and the grownups both gave a cascade. The evening's fun closed with a vegetable relay.

Cordially yours,
MARION WEBB,
43 Bow Street,
Beverly, Mass.

Soil Survey of Essex County

The new booklet, "Soil Survey of Essex County, Massachusetts," is now printed and available. Congressman A. Piatt Andrew, of the Sixth District, has placed a reasonable number of these booklets in our hands for distribution, with the request that they be made available to the parties who would value and prize a copy. It is, therefore, desirable that those who would like a copy of this booklet send a request to the Essex County Agricultural School immediately.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 11

HATHORNE, MASS., JULY, 1930

NO. 7

Vegetable Gardens Visited

Twenty students, accompanied by Instructors Metcalf, Dacy, Stearns and Gifford, visited the vegetable gardens of six first-year students on Tuesday, July 8. The trip was the first of two project tours arranged under the auspices of the local chapter of the Massachusetts Young Farmers' Association.

The group assembled at the School and Instructor Stearns carefully explained many of the practices carried out by the garden boys under his direction. The crops were inspected for the purpose of comparing them with other similar crops which were to be seen during the day.

The first stop was made at the garden of Arthur Peatman on Woburn Street, Andover. Arthur keeps up his home garden in addition to working eight hours per day on the E. E. Anderson farm near his home. Instructor Metcalf made a typical project visit with Arthur, viewing his records and accounts, estimating the value of work accomplished, and giving a demonstration to the students of training up tomato plants.

The next stop was at the home of Lester Dixon on Brown Street, Andover. This student lives on a twenty-two acre farm and has an exceptional opportunity to try out many of the practices taught at School. He works with his father and carries on his own vegetable garden, which was found to be in excellent condition.

The group stopped for lunch at Paul Ward's roadside stand on the shores of Haggett's Pond. Saul Shtrumpfman, an upper class student who accompanied the boys on the trip, assisted in serving the lunch.

The group made three stops in the afternoon, all of which had special features to be studied. Robert Spidell's garden, located at his grandfather's farm (Mr. Richard Battie) in Pleasant Valley, Methuen, was visited. Robert cares for one-half an acre of garden and some poultry, besides working on the market garden farm of Nathan Perry, in Methuen.

The next stop was the farm of John T. Chadwick of West Boxford, who has employed student Alexander Lawn of Lawrence. It is Lawn's first experience at real farming. Several interesting variety tests carried on at this farm were fully explained



A FAMILY REUNION OF THE FOUR EVENING POULTRY COURSE CLASSES

Members of Evening Poultry Classes and Their Families Hold Reunion

Members and graduates of the evening poultry classes, with members of their families, to the number of nearly one hundred, returned to the School on the evening of Thursday, June 26, for the first annual reunion. The event was a pronounced success from every angle. After enjoying a good basket lunch, during which the wonderful new varieties of strawberries grown at the School, were duly sampled and tested, the party separated into groups and started out for a tour of the farm. Not only were they interested in the poultry department, which is as interesting

to the students by Instructor Metcalf.

The last project visited was that of Arthur Bulgavis of Byfield. Arthur has a garden which he keeps in good condition, and in addition helps out on the large market garden enterprise of his father. Arthur has two brothers, James and George, who are also students at this School.

All of the six students visited averaged not less than 10 hours per day doing actual farm work. The twenty boys taking the trip must have profited by getting first-hand information concerning these excellent projects.

now as at any time of the year, but in the various other departments, fruit, ornamental, dairy, etc.

The groups returned to the main building as daylight was fading, and assembled in the Agricultural hall for a short program of speaking. Instructors and members of the Staff spoke very briefly concerning poultry problems to date, and Mr. Robert Parkhurst of Boxford gave a short helpful talk.

An opportunity would be overlooked if a few words were not said about these classes. The men and women who make up these classes almost without exception are steadily improving their plants and bettering their methods. The thoroughness with which they do this work, keep their records, and attend to vital details, is most encouraging to everyone connected with the School. These in authority at the Department of Education and at the School feel that this reunion outing marks a distinct event in poultry experience and short course training in Massachusetts.

From a Student's Report

I bought a magnifying lense this week. This is a very great aid in examining various specimens found during the day. On examination of a large black ant I was greatly interested in the large and powerful pincers. Now I understand why these fellows can give such a painful nip.

Essex Farmer and Homemaker

HATHORNE, MASS.

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CALENDAR

- July 28-Aug. 1—Vocational Agricultural Teachers' Conference at Amherst.
July 29-Aug. 1—Farm and Home Week at Amherst.
August 5—Essex County Fruit Growers' Association Meeting at Hathorne.
August 6—Market Garden Field day, Waltham.
September 2—Opening day for new students in both departments.
September 3—Opening day for advanced students in Homemaking Department.
September 29—Opening day for advanced students in Agricultural Department.

Fruit Meeting — August 5th

Fruit men in this vicinity have been notified of the annual meeting of fruit growers to be held at the school on August 5th.

County Agent Francis C. Smith has secured Mr. D. B. McCollom of Sterling, one of the members of the 90% Clean Apple Club, to meet with the Essex County fruit growers on that date. Professor W. H. Thies, Extension Horticulturist of the Massachusetts Agricultural College, will also be present.

The fruit growers will inspect the school nursery, which contains many new varieties, fruiting for the first time. The general orchard methods used at the school will also be explained.

It is expected that many fruit growers in this vicinity will avail themselves of the opportunity to attend this meeting.

Alumni Notes

AGRICULTURAL DEPARTMENT

Miss Lillian Pooler, daughter of Mrs. Bert Pooler of Fairmount Avenue, Saugus, was married to Clifford G. Sewell, '27, of Lynn, in Dorr Memorial Church, Lynnhurst, on Saturday evening, July 5.

Mrs. Thelma MacKenna, '26, twin sister of the bridegroom, was matron of honor, and the bridesmaids were Miss Myra Chase and Miss Marion Pooler, the latter a sister of the bride.

Roscoe MacKenna, '26, was best man. Rev. Burton B. Smith officiated.

* * *

Mr. and Mrs. James W. Bates, of 34 Conant Street, Danvers, recently announced the engagement of their daughter, Frances, to William F. Brown, '28, son of Mr. and Mrs. William Brown, of 16 Highland Terrace, Marblehead.

* * *

Among the graduates who have recently visited the School are Aubrey Vaughan, '26, Edward Batchelder, '29, Alden Cressey, '23, and Donald Anderson, '23.

* * *

Edward Batchelder, '29, of 238 Lincoln Avenue, Cliftondale, will enter New Hampshire University, College of Agriculture, in September.

Half-way Stand

Lewellyn Jones of Haverhill, Class of 1929, is again conducting the Half-Way Stand on the Newburyport Turnpike near the junction of Newbury and Maple Streets in Danvers.

Jones has operated the stand successfully since 1927, with the exception of last year, when he was employed by Robert H. Sawyer of Bradford. The stand specializes in quality farm products and is open daily from 10.00 A. M. to 9.00 P. M.

Orin Woodman of Ryfield, employed in the fruit division of the School, has returned to his work, having recovered from an injury to his head. Woodman was diving in the Ipswich River with other Camp Bauer boys when the accident happened.

Bernard Chadwick of Watertown is training in Floriculture under the supervision of Instructor H. L. White.

Essay Contest Winners

The winners in the recent essay contest conducted by the School in connection with its annual Junior High School Day, were Stella Georgelas, first, and Raymond Cullen, second. Both winners are students in the Bowditch School of Salem.

Camp Bauer

Camp Bauer, the home for boys selected to work on the School farm during the summer months, has now been conducted successfully for several years. This year the camp houses twenty-two students, and a more congenial company of young men would be hard to find.

This year Frederick Kezer of Newburyport, a graduate of Essex Aggie in the class of 1924, is counsellor. While at Aggie, Kezer took a prominent part in athletics, especially football. He attended the Agricultural College at Storrs, Connecticut, for about two years, leaving to engage in the dairy business in Newburyport. He is a member of the Merrimac Valley Athletic Club and still retains interest in all branches of athletics.

After working hours on the school farm, the boys at Camp Bauer engage in tennis, swimming, wrestling and baseball, under the supervision of the counsellor.

The radio, checkers, books and magazines offer wholesome indoor amusements.

Parents' Day

Parents' Day was observed in the Homemaking Department on Wednesday, June 18th, with the following program: ten A. M. to twelve M. visits to points of interest on the Farm and to exhibits and demonstrations in the Homemaking Building. Twelve to one-thirty in the afternoon, basket luncheon. One-thirty to three o'clock, a demonstration color reading, with models by Miss Mary Callan. The models were Miss Marjorie Tweedy of Saugus, Miss Mabel Stoss of Salem, Miss Evelyn Richards of Saugus, and Miss Bernice Walsh of Lawrence, all members of the senior class.

Miss Margaret Eggleston Owen, of Hyde Park, gave an address, "The Home, the Foundation Stone." A demonstration in cake making was given by Miss Lillian Degenhardt of North Andover and Miss Byrl Churchill of Saugus. Both girls are members of the freshman class.

A social hour was held from three to four, with refreshments.

Tercentenary

The School has taken an inconspicuous, but considerable part in the recent Tercentenary pageants in this vicinity. Through the efforts of Director Smith, straw roofs were supplied for the houses in the colonial village at Forest River Park, Salem. The School also furnished an old oxen yoke, an old-fashioned scythe, and a colonial hoe.

The School also supplied horses and equipment for the Danvers Pageant.

Roadside Marketing in Massachusetts

By CARLTON M. STEARNS, Sec.-Treas.,
Mass. Roadside Stand Association

Is the public rightly informed as to the method pursued by farmers in disposing of their produce at roadside stands? Frequently we hear of our neighbor buying some apples of poor quality at a certain stand in a nearby town or city, but after a short period of time do we find this stand operating? No; the owner has been compelled to close his stand because he has purchased inferior produce at the city markets and has sold it as his own or as native farm products. This type of business has been in competition with the honest-to-goodness farmer who has been endeavoring to make an honest living, marketing his own home grown or locally grown produce. True enough, Farmer Smith may have started a stand at his farm some years ago and during certain periods of the production season has been unable to supply the demand for certain products his customers have desired, due to climatic conditions, etc., and therefore he has been obliged to buy these products from neighbors to meet the demand. Possibly Mr. Smith's trade has grown to such an extent that he hasn't the production to meet the demand, and so he resorts to the method of purchasing products of good quality from his neighbors in order to keep his customers satisfied. Otherwise, his customers on driving out to his stand and finding him out of certain products will be disappointed and seek other stands where they will be able to purchase what they desire at all times.

The discouraging stories of unsatisfied customers at some types of roadside stands in Massachusetts has led a group of farmers who have tried to meet the public honestly and squarely, to organize the Massachusetts Roadside Stand Association with by-laws and rules to protect themselves and the public from fraudulence. These farmers feel that by some means of co-operative marketing they may dispose of their produce to better advantage, from a financial standpoint, and at the same time afford an opportunity for the public to purchase fresh produce at a moderate price.

There is no question but with improved roads and increased numbers of motor vehicles to bring the public closer to the source of supply, that there is a trending change to this form of marketing. If housewives know that they can drive out to farm in a very short time for fresh-pulled corn, fresh-picked peas or strawberries, are they not going to patronize

such stands as long as they receive a square deal? It is on this basis that the Massachusetts Roadside Stand Association was started, and on which New Jersey, Rhode Island, and others have followed suit.—From *Farm Salesman*, January, 1930.

Vegetable Growers and Florists Annual Field Day

August 6th marks the date on which the twelfth annual Field Day will be observed at the Massachusetts Agricultural College Field Station at Cedar Hill, Waltham. Everybody interested in home gardening or commercial growing is invited to visit the station for the purpose of observing the scientific work in progress as related to horticultural interests.

A complete assortment of gardening tools and machinery will be on display. Tractors, motor cultivators, hand cultivators, weeders, seeders, sprayers, dusters, several different makes of irrigation systems, and all manner of equipment necessary in modern gardening operations will be at the disposal of visitors for actual trial under practical conditions. Trying before buying, may save disappointment.

Specialists will be available for personal consultation on plant diseases, insect pests, soil fertility, greenhouse management, and other problems of the grower. Bring your sample of disease and insect injury along with you for diagnosis. If you suspect that certain areas of your soil are sour, bring samples of the soil and it will be tested for you and treatment recommended.

A caterer will be in attendance and there will be plenty to eat at a reasonable cost.

The Field Station lies to the northeast of Waltham Center, between Waverley and Waltham, on Beaver Street. In case of confusion, inquire for Cedar Hill, which is a well known locality in the vicinity. The hours are from 10 o'clock to 4 o'clock.

Tomato Culture

Superphosphate is a great food for tomatoes.

If you haven't added a little superphosphate about your tomato plants, you will receive better results by applying a small handful at once.

By staking tomato plants you may secure fruit earlier and of better quality. Prune or pinch out all side shoots or "suckers," so called, and allow only one or two leaders to develop. The plants should be gone over at least every ten days to keep this excess growth down and thereby put the plant food and water into fruit development instead of plant growth. —C. M. Stearns.

Annual 4-H Club Field Day

The Newbury 4-H Dairy Club, Methuen Handicraft Club, and the North Andover Clothing Club were the outstanding winners of the day's events.

On July 14, over 400 Four-H boys and girls chartered busses, trucks, and automobiles to get to Essex Agric for their Annual Field Day.

The morning was well spent in judging and identification contests covering nearly every project carried on in the county. The contests were followed by a basket lunch and a concert by the 4-H Club Orchestra of Haverhill.

The song contest was the next on the program, with eight clubs competing. North Andover won this contest and received a large 4-H Club Banner. Grover was second and East Haverhill third.

The Stunt Contest followed, with four clubs competing. This caused much merriment and laughter. Methuen Handicraft Club won this contest, also receiving a large 4-H Club Banner.

Athletic events occupied the remainder of the afternoon. Points scored in both morning and afternoon contests showed that the Newbury Dairy Club headed the list of winners, the Betacook Club of Methuen, second, and the Tilton Garden Club of Haverhill, third.

The Poster Contest, in which Food Club girls participated was exceptionally good. The winners were as follows: Class 1, Jennie Black of Methuen first, Bertha Black of Methuen second, Juliette Auger of West Boxford third, and Charlotte Semple of Gloucester fourth; Class 2, Marion Kfoury of Methuen first, Mary Kachanian of West Boxford and Eleanor Toye of Gloucester tied for second, Lillian Taylor of Methuen third, and Muriel Goucher of Gloucester fourth.

—H. J. S.

On to Camp Gilbert

This year Essex County will be represented by seven county delegates, one state delegate, and five leaders.

Every 4-H Club boy and girl in this county has a wonderful opportunity to get a free trip to Camp Gilbert, M. A. C., where outstanding boys and girls from every county in the state gather for one week of fun, education and inspiration.

The delegates to represent Essex County this year are:

Garden—Arthur Gordon, State delegate, Rowley; Robert Grant, County delegate, Andover.

Poultry—Silas Little, Newbury.

Dairy—Harvey Turner, Andover.

Clothing—Nancy Ordway, Groveland.

Canning—Dorothy Lambert, Methuen.

Handicraft—Richard Mueller, Methuen.

Vegetable Dinners

Prepared by MAY E. FOLEY,
Extension Nutritionist

With the advent of warm weather, vegetable dinners are gaining in popularity, both at home and in public eating places. A vegetable dinner may be very delightful or quite the opposite. There are several things to remember in planning and combining a vegetable plate.

1. Think of color. Make the plate attractive.

2. Use part mildly flavored and part strongly flavored vegetables.

3. Have variety in texture, that is, use one crisp vegetable if others are soft.

4. Have variety in method of preparation, for example, one raw vegetable, one buttered vegetable, one creamed or escalloped vegetable, and perhaps a broiled or stuffed vegetable.

5. Always use milk, eggs or cheese in some way with a vegetable plate. They make it more tasty and better balanced.

Suggestions for Vegetable Plates in Menus

Vegetable Plate:

Potato cooked or baked in skin

Spinach

Buttered carrots

Hard-cooked egg in lengthwise slices

Bread and butter

Tapioca cream over canned peaches

Milk for children

Vegetable Plate:

Creamed potato

Tomato stuffed with cream or cottage cheese, celery and mayonnaise

Buttered cabbage

Ripe olives

Hot rolls and butter

Chocolate pudding (made with milk)

Milk for children

Question and Answer Column

Question: What is the best way to prepare vegetables?

Answer: Vegetables baked, boiled or steamed in their skins retain the most food value and are generally more appetizing than when prepared in any other way. They should be served raw whenever possible.

Question: Why should cabbage be cooked with the cover off?

Answer: Cabbage, like all strongly flavored vegetables—this includes onions and turnips—should be cooked with the cover off for three reasons. It is less strong in flavor, more easily digested, and leaves less odor in the house. When cabbage is shredded it should be cooked in a small amount of water for ten or fifteen minutes, and the juice served. If it is cut in quarters, twenty minutes cooking should be sufficient.

Question: Is a pressure cooker good for cooking vegetables?

Answer: Some vegetables, such as potatoes, beets, carrots and parsnips, may be cooked in the pressure cooker. It should not be used for strong and green vegetables. The green ones lose their color and the flavor is changed when they are cooked in this manner.



ESTHER LAPKA—BEVERLY

Esther Lapka Winner of the 1930 Essex County Cotton Dress Contest

Esther Lapka, of 381 Elliott Street, Beverly, winner of the County Dress Contest, first became a 4-H Club member in 1926, joining the Clothing Project Club. Under the excellent leadership and guidance of Miss Marion Parker of the Beverly Health Center, who has charge of all 4-H Club work in Beverly, Esther's vision of the possibilities in 4-H Club work was considerably broadened. She soon became interested in other projects, and along with her four years of Clothing she has done equally good work in her four years of Canning and three years of the Big Sister project.

Last year Esther won second prize in the Cotton School Dress Contest, and with encouragement from her leader she started the New Year with the determination to win the honors which she received in this recent contest.

Esther is a Junior in High School and expects to continue in Club work as well as furthering her education.

—H. J. Shute, County Club Agent

4-H Club Girls Match Their Skill in Cotton Dress Contest

The second cotton dress contest held in connection with Better Homes Day, June 6, 1930, showed much improvement over last year's contest. Thirty-six 4-H Club girls, representing eight communities in Essex County, gathered at the Essex County Agricultural School to compete.

The contest was divided into three classes. Class 1 was for sleeveless school dresses made by girls under 12 years of age. Class 2 consisted of cotton school dresses with set-in sleeves made by girls over 12 years of age. Class 3 was a cotton party dress for the girls who competed in last year's school dress contest and who were taking the third year project or over.

Esther Lapka of Beverly won the highest score in the county and received first prize on her party dress. Lillian Knott of Groveland won second highest honors in the county and first on her cotton school dress in Class 2. These girls will receive special prizes offered by the National Committee on Boys and Girls 4-H Club Work.

Other winners in the party dress contest were Blanche Hsley of Georgetown, second; Valeria Loches of Methuen, third, and Ruth Noyes of Groveland, fourth.

The school dress contest winners for girls over 12 were: Lillian Knott of Groveland, first; Helen Burke of Beverly, second; Joanna Wawryk and Elizabeth Prescott, both of Georgetown, third and fourth.

In the class for girls under 12 years, Mary Louise Greenler of West Boxford was first; Gertrude Shevenell of Groveland, second; Marion Lyons of West Boxford, third, and Margaret Lever of South Groveland, fourth.

Miss Marion Forbes, Assistant State Club Leader, judged the dresses. She was assisted by Miss Alice B. Show, of Plymouth County Extension Service.

REGIONAL CONTEST

The winners in Norfolk, Middlesex and Essex Counties cotton dress contests met at the Middlesex County Extension Office for the Regional Contest. This contest was held for the purpose of selecting dresses to compete in the state-wide contest at Amherst. Middlesex County won three first prizes and Norfolk County one first prize. The Essex County girls received one third and two fourth prizes. These were won by Mary Louise Greenler, Gertrude Shevenell and Esther Lapka.

—Horace J. Shute,
County Club Agent

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NO. 8

Ernest A. Howard, Class of 1918

Ernest A. Howard, a graduate of this School in the Class of 1918 and now Agricultural Supervisor for the Haverhill School Department, carries on an extensive agricultural program in the city. Although his principal work is with boys and girls in the grammar grades, he also conducts classes in the High School and Continuation School. In addition to his school classes he organizes groups of young people into 4H Clubs and sees to it that these young people get the fundamentals of the best agricultural practices. His work with adults has been equally successful, and through his efforts a large tract of city land is set aside for adult gardens. In spite of the drought of the present season and a gravelly soil, these gardens have flourished.

Ever on the alert to keep his boys interested, he has organized a 4H Kite Club and a 4H Club Orchestra, both of which are very successful. In addition to his school and 4H Club activities, he still finds time to help out in the larger affairs of the community. Realizing the need of bringing poultrymen together, he was instrumental in organizing the Haverhill Poultry Association, and he now serves as chairman of the program committee. He has served as clerk of the Haverhill Farmers' Market for several years. For a few weeks in the winter, when he is allowed a respite from his duties in Haverhill, he conducts classes in freeland lettering and sign painting at this school, and also assists with the vegetable gardening classes.

This graduate of Essex Aggie is promoting agriculture in his home city and is doing an excellent work with the boys and girls who sign up with his clubs and classes.

Apple Maggot Inspection

The Massachusetts Department of Agriculture will, upon request, examine Massachusetts apple orchards and harvested apples for the purpose of determining the condition of such orchards or apples in respect to apple maggot infestation. In order that inspections of fruit on the trees may be made as nearly as possible to the time of picking, the inspections will be made and reports confined to one variety at a time.



HOME-MADE BULL PEN AT THE FARM OF HARVEY TURNER, ANDOVER

Statements will be issued to applicants showing results of such inspection.

A nominal fee of \$1.00 per inspection will be charged for this service. Applications should be made to Division of Markets, 136 State House, Boston, and checks made payable to Commonwealth of Massachusetts. Applications should include estimated production of variety desired inspected and probable date when picking will start.

This inspection service will be carried on up to December 1, in so far as funds and personnel permit. Preference will be given to commercial orchards and consideration will be given to applications in order of receipt.

This service is designed for use on apples intended either for domestic or export markets, in order that growers may be fully informed regarding the condition of their fruit before sending to market. Growers have expressed the opinion that the information contained in the reports of these examinations will be of distinct value to producers of clean fruit in making sales.

It should also be valuable to those who wish to export, as, by this preliminary examination, they will be able to determine the likelihood of their apples passing the final federal inspection. Statements of condition issued with the service do not take the place of federal certificates required on all export apples.

Bull Pen Made of Discarded Telephone Poles and Boiler Tubing

The above photo is the herd sire in the bull pen made by Harvey Turner, South Main Street, Andover. Mr. Turner got old discarded telephone poles, cut off the bottom nine and one-foot, and set them three feet in the ground. He bought some two and one-half inch boiler tubing for the sides. A hole was cut in the pole into which was inserted the tubing. Then a two by four was nailed to the post with 20 pennies. The posts are six and one-half feet above ground, six-pipe high, posts are set seven feet apart. There are 13 posts in this pen. The cost of materials was not over \$16.

Edward Shattuck, River Road, Andover, is building a bull pen just like Mr. Turner's. Others may want to follow their example.

—Francis C. Smith,
County Agent.

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A MONTHLY PUBLICATION SUBSCRIPTION FREE

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Entered as second-class matter, May 28, 1919, at the post office at Hathorne, Mass. under the Act of August 24, 1912.

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CALENDAR

September 2—Opening day for new students in both departments.

September 3—Opening day for advanced students in Homemaking Department.

September 29—Opening day for advanced students in Agricultural Department.

Essex Chapter of the Massachusetts Young Farmers' Association Conducts Second Project Tour

On Wednesday, July 16, the Essex Chapter of the Young Farmers' Association of Massachusetts conducted a tour, visiting five student projects in Essex County.

Twenty-two students, all members of the association, and seven instructors made the trip in private automobiles. The cars left the school at 9 a. m. and made the following stops:

First stop—Alex Swiniarski, Peabody.

Second stop—Earle Blake, Peabody.

Third stop—James Bulgarski and Walter Mysliwy, Cherry Hill Farm, Beverly.

Fourth stop—Bradford Webb, Greycroft Farm, Wenham.

Fifth stop—George Barbean, Magnusson's Greenhouse, Manchester.

Basket lunch was enjoyed in the picnic grove at Cherry Hill Farm. Ice cream and milk were served.

This was the second tour of the season to be made under the auspices of the Young Farmers' Association, both of which proved very successful. It is hoped that such tours will be carried on as part of next year's program.

The value of such project visits to the students can hardly be over-estimated. All the students returned from the trip with much information, gleaned from the experiences of the boys visited.

The tour was in charge of a committee of which Harold Bowen was chairman, with instructors C. M. Wood and J. E. Eastwood, faculty advisors.

—Harold Bowen, Reporter.

The Grange Lecturers' Conference will be held August 25 to 29, inclusive, at Durham, New Hampshire. The conference is not limited to lecturers but open to all Grange members, each Patron attending being required to register with the state lecturer at a cost of \$1.00, which entitles one to special rates and privileges of the conference.

Alumni Notes

KENNETH DAWKINS, '28, is employed at Spofford's Greenhouse, Groveland.

HAROLD HOLDEN, '28, is employed as milk tester for J. B. Prescott Company, Bedford, Mass.

HARRY LEAR, '27, 27 Prince Street, Danvers, owns a 20-acre truck farm on Andover Street.

JOHN E. LOMBARD, '24, owns and operates a large dairy farm on East Street, Ipswich.

JAMES R. LORD, '21, is a dairyman on the E. H. Harriman estate, address Box 82, Harriman, New York.

JOHN H. LOVETT, '17, 14 Ashland Place, Gloucester, is owner of the Saunders Ice Cream Company.

FRED C. MORRIS, '22, is employed on the Walker Estate, Manchester, Mass.

C. RAYMOND POOR, '18, is now laboratory technician for the Richfield Oil Co. Address, 734 Gladys Ave., Long Beach, California.

PARKER RYAN, '24, is chemist for H. P. Hood & Sons, Inc. Address, 22 Oneida Street, Lynn, Mass.

WINTHROP E. SARGENT, '20, is superintendent of a private estate at Southport, Conn.

MR. and MRS. J. HAROLD SEELEY, '17 (Laura E. Richards, '20), 77 Opeschee Street, Laconia, N. H. Now engaged in dry cleaning business. Have one son, born March 31, 1929, named Milton J. Seeley.

RANDOLPH H. TODD, '18, 1469 154th Street, Whitestone, N. Y. Repairs sales manager in New York City for the International Harvester Co. of America.

Homemaking Department

KATHERINE CASHMAN, '29, 41 River St., Danvers, is mother's helper in Salem.

EUNICE FREIHALD, '29, 7 Sutherland Street, Andover, is at home.

E. DORIS GRIFFIN, '27, is assistant cooking teacher at the Rockport High School.

HAZEL HENDERSON, '26, 27 Hawley Street, Lawrence, is engaged with home duties.

GLADYS HULSMAN, '24, 25 Rand Street, East Lynn, is a private nurse.

ELIZABETH HUTCHINSON, '27, 316 Nahant Road, Nahant, is engaged as a tea-room assistant.

GERTRUDE JAMES, '24, is supervisor of operating room at Keystone Hospital, Harrisburg, Pennsylvania.

MRS. E. ROBERT LITTLE (Elizabeth Palmer, '16), Elm street, Boxford, Mass. Housewife.

G. RAE REID, '25, is working in the office of Dr. Frank R. Lee, North Andover.

HELEN RIDDERSTROM, '29, is a student at Framingham Normal.

ALVA E. ROSS, '28, is attending the Boston School of Domestic Science. Address, 40 Berkeley St., Boston.

MILDRED RUSSELL, '28, is mother's helper. Address, Box 75, Beach Bluff, Mass.

RUTH STULTZ, '29, is in training at the Salem Hospital.

School Notes

Everett Nelson, of the Freshman class, has used his spare time in constructing an aquarium which he has placed on one of the benches in the first section of the greenhouse. The aquarium attracts much attention, as it is now filled with several kinds of goldfish and many aquatic plants.

Alice Dalton, a senior in the homemaking department, is instructor of Handicraft at the Middleton Health Camp.

The students employed in the Ornamental and Floriculture divisions of this School purchased one hundred cacti and twenty-five resurrection plants out of their own resources. The plants were shipped from Texas and their development will be watched with interest by the students.

From a Student's Report

A friend of ours gave us an old hay rake. He said, "It isn't any good, because the wheel keeps coming off." I took it home and put a bushing and a few new bolts in the wheel and gave it a coat of red iron paint. It looks and works like a new one, for about 25 cents. I saved the price of a new rake, or \$41.00.

Cost of Growing Rhode Island Red Pullets

Professor F. H. Branch, Extension Specialist in Farm Management at M. A. C., assembled the following figures about a year ago as indicating the probable cost of raising Rhode Island Red chicks to the pullet stage. In a statement to the poultrymen, he gives the following items, some of which are not generally included by the average poultryman.

Probable Cost and Receipts for Most Poultrymen	Per Pullet
Chicks started	300
Per cent loss	10%
Pullets raised	120
Broilers and Culls sold	150
Broilers and Culls per pullet	1.25
Pullets per 100 chicks	40
Cash Costs.	
Chicks	\$75.00 \$.625
Feed (mash and grain)	145.20 1.21
Incidental (coal, litter, oil and milk)	36.00 .30
Total cash cost	256.20 2.135
By-Products Credits:	
Broilers and Cull Pullets	123.75 1.03
Net cash cost	\$132.45 \$1.105
Costs not Cash:	
Labor	60.00 .50
Overhead (bldgs., land and interest)	36.00 .50
Total net cost	\$228.45 \$1.905

Cost Items to Include.

The figure commonly given out by poultrymen as representing their average cost for growing pullets is usually only a partial cost figure. This is because poultrymen include with their expenses only direct cash costs, such as feed, fuel, litter, and the cost of chicks if purchased. This method of computing costs has resulted in some misunderstanding and in a figure that has seemed very low to those who purchase their pullets.

To obtain a complete cost figure, there should be added to these items usually included, a labor charge and also one to cover use of land, equipment and other overhead. In the above summary all cost items are included, and, following the method known to most poultrymen, receipts from the sale of broilers and cull pullets have been credited to the enterprise and deducted from the total of the cost items.

It is believed that the final figure represents the probable average cost for the mortality rate expressed and the prices given. Different rates of mortality or a change in feed or broiler prices would, of course, affect the final cost figures.

TOPSFIELD FAIR TOPS THEM ALL

SEPTEMBER 3 TO 6 INCLUSIVE

A Remedy for Poison Ivy Rash

WALTHAM FIELD STATION

Of all the remedies that are recommended for the suffering caused by poison ivy, there is one which is really efficacious and which deserves wider advertising. That is a 5 per cent solution of potassium permanganate. This remedy is recommended by Dr. James F. Couch, of the United States Department of Agriculture, an expert on poisonous plants. Any druggist can mix it in a few minutes and the cost is little.

Bathe the affected skin freely with the solution, swabbing it on with a soft cloth or bit of cotton, and the poison will be oxidized and destroyed in a few hours. On very tender skins the solution may be diluted one-half.

This treatment leaves a brown stain which can be removed with soap and water. As this means is rather slow, one per cent solution of oxalic acid may be preferred, since it works immediately. If the skin is broken and quite raw the oxalic acid will produce a stinging sensation. In such cases the slower, less painful soap and water method may be employed.

Persons who are obliged to work among poison ivy and poison sumac may prevent infection by washing exposed parts with a fifty-fifty mixture of water and glycerin to which five per cent of ferric chloride has been added. Allow it to dry on the skin.

Anyone desiring to destroy poison ivy by spraying, consult the County Agricultural Agent, Francis C. Smith, at the Essex County Agricultural School, Hathorne, Mass.

Change in Apple Grading Regulations

Under the authority contained in Section 110, Chapter 94 of the General Laws, Regulations concerning the Grading and Packing of Apples are hereby modified as follows:

Color requirement of Massachusetts Fancy Grade Wealthy apples reduced from 75% to 50%.

Color requirement of Massachusetts A Grade Wealthy apples reduced from 35% to 15%.

(Signed) ARTHUR W. GILBERT,

Commissioner.

Effective August 7, 1930.

Last Call for Mouse Bait

Orders for the improved bait for controlling mice in orchards should be sent immediately to the Middlesex County Farm Bureau, 657 Main St., Waltham, Mass., to obtain the special rate before September 15. This co-operative will furnish information as to prices and delivery.

This bait is prepared by the U. S. Biological Survey in their mixing plant at McCammon, Idaho. After many years of research, steam-crushed whole oats treated with strychnine and paraffin oils has been found to be the most acceptable bait for mice. Under the present arrangements the bait is distributed at a less cost than it can be mixed individually and will probably give better results than if home-made.

It is far cheaper to protect your trees with poison bait than to repair them after injury has been done. The bait is conveniently sacked in 25-lb. bags, easy to use, and economical—nothing more to add. This may be another "mouse year." Now is the time to order your bait and make plans to put it out in poison stations by the first of November.

—Ernest M. Mills,

Regional Leader, Rodent Control.

New Cow Tester Engaged

The directors of the Essex County Dairy Herd Improvement Association recently engaged Mr. James N. Leekie, a graduate of the Georgia College of Agriculture, as official tester. Mr. Leekie began work in June. He is well qualified, having won first prize at the National Livestock Show last year in judging Jerseys, and fourth position as a judge of all breeds of cattle.

The members are fortunate in securing the services of such a high class and experienced young man. Dairying in Essex County should profit greatly from Mr. Leekie's activities.

Poultry Judging Contest

The Hampden County team won first place in the poultry judging contest held at M. A. C. during Farm and Home week. Worcester County placed second, and Essex County, winner of last year's contest, placed third. Judging teams from Middlesex, Bristol, Franklin and Plymouth counties were entered. The members of the Essex County team were: A. W. Doolittle, John Hall, Jr., and Homer Rowell. William B. Moore selected the team.

Ice Cream for Dessert

Prepared by MAY E. FOLEY,
Nutrition Specialist.

There is no hot weather dessert that is more popular with all members of the family, both old and young, than ices and ice creams. And they are not only well liked, but most wholesome. Milk, eggs and fruits may be used to advantage in this way.

It is often a convenience to have a standard recipe, which may be varied from time to time to use different ingredients and add interest.

Plain Vanilla Ice Cream (standard recipe)

- 2 cups milk
- $\frac{2}{3}$ cup sugar
- $\frac{1}{8}$ teaspoon salt
- 2 eggs (or 1 egg and 1 table-
spoon cornstarch)
- 2 cups thin cream
- 1 tablespoon vanilla

Heat the milk in a double-boiler, add the sugar, then salt, and stir until dissolved. Pour the sweetened milk mixture slowly into the dish containing the well-beaten eggs, stirring constantly. Transfer the egg and milk mixture back to the double-boiler. At this point, if cornstarch is used as part of the thickening, mix it well with cold water and add it to the mixture, stirring constantly. Cook the custard until it coats the spoon. Remove from the fire, and when cool add the cream and flavoring and freeze, using a mixture of three parts finely chopped ice to one part rock salt. If using automatic freezer, use two parts ice to one part salt.

Orange Ice Cream

Use the recipe for vanilla ice cream, but instead of 2 cups of milk and 2 cups of cream, use 1 cup of orange juice, $\frac{1}{2}$ cups milk, $\frac{1}{2}$ cups cream. Increase the sugar to 1 cup and omit the vanilla flavoring. Make the custard with the milk, sugar and eggs as usual, and when it is cool, not before, add to it slowly, the orange juice, then the cream.

Berry Ice Cream

Use the recipe for vanilla ice cream. Add to the mixture, when it has cooled, about $\frac{1}{2}$ cups of crushed berries. Increase the sugar to 1 cup and omit the vanilla flavoring.

Peach Ice Cream

Use the recipe for vanilla ice cream, adding to the mixture, when cool, 2 cups of peach pulp and juice. Increase the sugar to 1 cup. Omit the flavoring.

Apricot Ice Cream

Use the recipe for vanilla ice cream, adding to the mixture, when cool, $\frac{1}{2}$ cups apricot pulp and juice. (Use the food grinder.) Increase the sugar to 1 cup and omit the vanilla flavoring.

Grapenut Ice Cream

Increase the sugar to $\frac{3}{4}$ cup, and add 1 cup of grapenuts to the vanilla ice cream.

Peanut Brittle Ice Cream

Reduce the sugar to $\frac{1}{2}$ cup and add 1 cup of finely ground peanut brittle to the vanilla ice cream.

Community Chairmen Planning for Fall Projects

The Home Demonstration Agent is making plans with the Community Extension Committees for projects to be started in September and October. The Extension Specialists of Massachusetts Agricultural College will launch several of these courses.

Miss Esther B. Cooley, Clothing Specialist, is to give a lecture on "Fashions and Figures," as an introduction to the Garment Finishes project. Mrs. Ruth D. Morley, Child Development Specialist, starts this project early in October, while Mrs. Harriet J. Haynes, Home Management Specialist, starts the Better Kitchens project the latter part of October. Miss May E. Foley, Nutrition Specialist, holds one meeting on Community Meals early in October.

The Home Demonstration Agent and her assistants, Mrs. Mary McIntire, Mrs. Esther Snow, and Mrs. Mary Roundy, will conduct meetings in conjunction with the Specialists.

—Marion P. Crawford,
Home Demonstration Agent.

Six Towns Appoint Community Extension Committees for 1930-1931

The following communities are the first to send in the names of their Community Extension Committees for the year 1930-1931:

Merrimac—Mrs. Frank N. Rand, chairman; Mrs. Charles H. Staples, vice-chairman; Mrs. Willard T. Kelly, vice-chairman.

Rockport—Mrs. Pearl S. King, chairman; Mrs. Charles Burbank, vice-chairman.

Andover—Mrs. Walter Friewald, chairman; Mrs. Alexander MacKenzie, vice-chairman; Mrs. Sidney Batchelder, vice-chairman.

Middleton—Mrs. William Young, chairman; Mrs. Roger Clapp, vice-chairman; Mrs. Otto Currier, vice-chairman; Mrs. Hazen M. Richardson, vice-chairman; Mrs. Ernest T. Foss, publicity chairman.

Saugus—Mrs. Ross Coon, chairman; Mrs. G. C. Woodson, vice-chairman; Mrs. George Shea, vice-chairman.

Haverhill—Rocks Village—Mrs. Leonard Kimball, chairman; Mrs. John York, vice-chairman; Miss Edna Williams, vice-chairman.

Marblehead—Mrs. Edward J. Dugan, chairman; Mrs. Richard Symonds, vice-chairman; Mrs. Everett Foster, vice-chairman; Mrs. Murray Friend, vice-chairman.

—Marion P. Crawford,
Home Demonstration Agent.

Some Rules for Healthful Eating

The bureau of health education of the New York City department of health gives the following rules for healthful eating:—

1. Don't bore your stomach with a monotonous diet.
2. Don't despise the lowly turnip and onion.
3. Don't scorn the cheaper cuts of meats; when properly cooked with vegetables, they are better than a diet of steaks and chops.
4. Buy fresh vegetables when they are plentiful.
5. Allow a quart of milk a day for each child and a pint for each adult.
6. Don't be afraid to try new dishes.
7. Adopt a cosmopolitan menu—become acquainted with minestrone, goulash, Irish stew, pig's knuckle and sauerkraut, and a ragout with vegetables.
8. Don't eat too many sweets.
9. Drink several glasses of water daily.
10. Do real cooking. Good health will not last with last-minute meals.

—Hygeia.

New Bulletins

"Small Greenhouses," by Albert E. Wilkinson, Extension Service, Connecticut Agricultural College, Storrs, Connecticut.

"Growing Early Cabbage," by Albert E. Wilkinson, Extension Service, Connecticut Agricultural College, Storrs, Connecticut.

"Jellies, Jams and Marmalades," Extension Service, Connecticut Agricultural College, Storrs, Connecticut.

"Profitable Turkey Production," by Roy E. Jones, Extension Service, Connecticut Agricultural College, Storrs, Connecticut.

This is what Dr. Mayo finds in an average man:—

Fat enough to make seven bars of soap.

Iron to make an eight-penny nail.

A pinch of magnesium.

Potassium enough to explode one toy cap pistol.

Sulphur to chase the fleas off one dog.

Phosphorus enough to tip 2,500 matches.

All of these you can buy at a drug store for about 98 cents.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 11

BATHORNE, MASS., SEPTEMBER, 1930

NO. 9

Make Lawns Now

September is the best month of the twelve to rebuild, patch, renovate, or reseed the home lawn. Fall-sown grass plants develop better root systems than spring-sown, their roots strike deeper. They withstand drouth. Fall-sown grass seed germinates better than May-sown grass seed. Fall-sown grass plants become well established before it is warm enough in spring for weed seed to germinate. Fall-sown grass plants of acid-loving sorts on an acid-reacting soil, under intelligent management, will produce that ideal of all home owners, the weedless, drouth-resistant lawn.

Most lawns are born with weeds, due to the use of low grade and low-priced seed, impractical seedling, and indifferent care. Low-priced grass seed mixtures are the most expensive per pound of the desirable grasses contained in them.

Select Bent Grass seed or stolons for acid-reacting soils, Kentucky Blue Grass for alkaline soils, Red Fescue for sandy soils, Rough-stalked Meadow and Fine-leaved Fescue, half and half, for shade of trees, Canada Blue Grass for gravel and poor clay soil, or to prevent erosion on slopes, Wood Meadow for dry, shady locations.

The Massachusetts Agricultural College, in Extension Leaflet No. 85, suggests the following mixtures when mixed at home:

Good soil, known to be acid: Rhode Island Bent 4 parts, Red Top 1 part. Good soil, known to be alkaline: Kentucky Blue Grass 6 parts, Red Top 1 part. Good soil, of unknown soil reaction: Kentucky Blue Grass 6 parts, Rhode Island Bent 4 parts, Red Top 2 parts. Rate of sowing of either of the foregoing mixtures is 3 pounds per 1,000 square feet.

Sandy soil: for an excellent turf but rather hard to mow, either Cheving's or Red Fescue, 3½ pounds per 1,000 square feet.

Shady location: Fine-leaved Fescue 1 part, Rough-stalked Meadow 1 part, applied at the rate of 3 pounds per 1,000 square feet.

Samples of lawn soil are tested for acidity at the School. A tablespoonful of a mixture of samples taken from different parts of the lawn is enough. Samples of certain inferior portions of the lawn area should be marked to distinguish them from the composite sample.

(Continued on page 2)



YOUNG FARMERS AND ESSEX COUNTY FRUIT GROWERS CONDUCT FRUIT STAND AT TOPSFIELD FAIR

Young Farmers Exhibit at Topsfield

The Essex Chapter of the Massachusetts Young Farmers' Association exhibited at the Topsfield Fair some of the products raised by the members of the Association. The exhibit covered about thirty feet of table and wall space in the vegetable building and included displays of Fruit, Field Crops, Plants and Flowers, Vegetables, Poultry and Dairy Products. The exhibit was assembled in a pleasing manner, so as to show the relative value of various animal and plant enterprises in Essex County.

Arrangements for making the exhibit at Topsfield Fair were in charge of Lawrence Westcott of Melrose. President of the Essex Chapter of the Young Farmers' Association, and the work of assembling the material and setting up the exhibit was undertaken by the boys themselves with Instructors Wood and Eastwood as advisors.

The following members were responsible for their respective divisions of the exhibit:

Harold Bowen, Ipswich, Ornamental Gardening; Albert Gordon, Salem, Floriculture; Donald Aylward, Peabody, Vegetable Gardening; Albert Duggart, Lawrence, Vegetable Gardening; Otis Curtis, Gloucester, Field Crops; Earle Blake, Peabody, Dairying; Lawrence Westcott, Melrose, Dairying; Aarne Kolhonen, Peabody, Poultry; Francis Biery, Methuen, Poultry; Orin Woodman, Byfield, Fruit; Sidney Batchelder, Andover,

Essex Aggie Students Win Prizes at Topsfield Fair

Each year an increasing number of Essex Aggie students exhibit their products at the Topsfield Fair and a large number of them receive the coveted ribbon and cash prizes. This year the following students were awarded cash prizes for vegetables and poultry exhibited:

Jack Schafer won four firsts and two seconds; Robert Spidell, two firsts, two seconds and one third; Theron Johnson, three seconds and one first; Peter Petkewich, one first and two thirds; Howard Manning two firsts and one third; Frank DeLuca, one second and two thirds; George Cross, two firsts; Frank Williams, one first; Roland Gray, one first; James Forrest, one first; George Michelson, one second; Manford Dyer, one second; Dorrall Berry, one second; Arthur Pentman, one third; Theron Johnson, James Forrest and Herbert Henderson each received one first prize in the adult classes. In Poultry, Ernest Blaney received two firsts and one second; Arthur Pentman, one first.

Fruit: Carleton Symmes, Saugus, Fruit.

The chapter also conducted a stand for the sale of cider and fruits, co-operating with the Essex County Fruit Growers. The money realized from this undertaking will help toward financing the future activities of the Chapter.

HAROLD BOWEN,

Reporter.

Essex Farmer and Homemaker

HATHORNE, MASS.

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CALENDAR

Sept. 29th—Opening day for advanced students in Agricultural Department.

Oct. 7th—Opening date for Evening Poultry Class.

Nov. 25th—Graduation Day.

Entering Classes

A total of one hundred thirty-four (134) new students have already registered in the two departments of the school for the year 1930-1931. Eighty-one are registered in agriculture and fifty-three in homemaking. These figures include only those students admitted during the first week of school.

Twenty-four towns and cities are represented in the entering classes, with Lynn sending the largest number, a total of eighteen students. Saugus is second with sixteen, Salem third with fifteen, Lawrence and Peabody fourth, sending ten students each.

Poultry Course for Adults

The evening poultry course for adults will begin on Tuesday, October 7, 1930, at 7:30 P. M.

With the large number enrolled, two groups will be formed after the first meeting. One group will meet on Tuesday and Thursday evenings and the other on Monday and Friday evenings. Instructors Bennett and Miltimore will be in charge of the courses.

Mr. Miltimore, who succeeds W. B. Moore in the poultry department of the School, comes from West Springfield, where he has had several years' experience in teaching vocational agriculture.

Judging at Brockton and Eastern States

The Essex Chapter of the Massachusetts Young Farmers' Association sent a team to the Brockton Fair in order to judge fruit. Bradford E. Webb of Andover placed second; Carleton C. Symmes of Saugus, third; Sidney Batchelder of Andover, fourth, and John Ellis of Peabody, fifth. There were thirteen contestants from eastern Massachusetts.

Jack Wong, John Quinn, Donald Aylward, and Albert Doggart competed in the vegetable judging contest at Brockton Fair on Friday, September 12. These students have been working at the School vegetable garden this summer as a part of their project work.

A livestock judging team, consisting of students Stanley Chlebowski, Otis Curtis and Lawrence Westcott, was sent to Brockton. Curtis received fourth place, while George Lambert, another Essex Aggie student, judging in the 4-H group, placed third.

Lawrence Westcott, Otis Curtis and George Lambert represented this School in livestock judging at the Eastern States Exposition. Westcott was third highest individual scorer in a field of 42 contestants and was awarded a medal.

Alumni Notes

Fred H. Reed, Jr., Class of 1926, was married recently to Miss Viola Cashman. Mr. Reed is a foreman at Turner Hill Farm and resides at Mt. Pleasant Street, Ipswich.

The marriage of Miss Grace V. Torson of Lynn, Class of 1929, to Mr. Stewart Ireland has been announced.

Award of Merit

The Ornamental and Floricultural Divisions of the School received a special award of merit from the State Department of Agriculture for a unique display of plants and flowers. The exhibit was planned and set up by students Kirk, Nelson and Chadwick.

Football Schedule, 1930

Oct. 3. St. Joseph's Juniorate.
Oct. 10. Salem Seconds.
Oct. 13. Methuen.
Oct. 18. Marblehead.
Oct. 25. Open.
Oct. 31. Dummer.
Nov. 8. Swampscott.
Nov. 15. Gloucester.
Nov. 22. Open.

Junior Judging Contests

Junior Judging Contests in Livestock, Poultry, Fruit and Vegetables were held at Topsfield with the following results:

Livestock Judging (Team Scores)

Worcester, first; Essex County 4-H Club, second, and Essex County Agricultural School, third.

Individual Scores

Edward Cutting, Worcester, first; Silas Little, Essex County 4-H Club, second, and Lawrence Westcott, Essex, third.

Fruit Judging (Team Scores)

Essex County Agricultural School, first, and Norfolk County Agricultural School, second.

Individual Scores

Bradford Webb, Essex, first; Scholz, Norfolk, second, and Gabrielo di Giannommaso, Norfolk, third.

Vegetable Judging (Team Scores)

Essex County Agricultural School, first; Essex County 4-H Club, second, and Plymouth County 4-H Club, third.

Individual Scores

Jack Wong, Essex, first; Robertson, Jamaica Plain, second, and Fienmedoro, Norfolk County, third.

Poultry Judging (Team Scores)

Plymouth 4-H Club, first; Weymouth, second, and Norfolk County Agricultural School, third.

Individual Scores

Gooch, Plymouth 4-H Club, first; Randall, Weymouth, second, and Smith, Weymouth, third.

(Continued from page 1)

Rebuilding a lawn is one thing; patching and improving an established lawn is another, and usually the more satisfactory method, provided permanent sorts of grasses cover at least half the lawn area.

September and early October comprise the most favorable period for thickening up the old lawn. First rake over the sod, tearing out weeds, crab grass, tussocks, and dead grass clippings. Use an iron-toothed rake and get right down to the grass roots. Next top-dress the old lawn to a depth of one-half inch with a mixture of 14 wheelbarrow loads (1.54 cu. yds.) of sifted loam and 10 pounds of superphosphate for every 1,000 sq. ft. of turf. In stubby lawns an inch of loam may not prove excessive. The superphosphate induces strong root growth in the young plants. Rake in and roll thoroughly, adding more loam where needed. Divide the grass seed into four equal parts, if sowing by hand. Sow one part crosswise, one part lengthwise, and the other parts diagonally, thus insuring an even distribution. Cover seed lightly by means of a birch-brush broom or a wooden-toothed lawn rake. Then roll and water, or leave the watering to the fall rains.

—H. L. WHITE.

Rabbits for Fur and Food

By MRS. DOROTHY P. HOULE

It is a rather interesting thing to consider that a century or more ago, wool and flax were raised, spun and woven by the women of Essex County, and now comes the possibility of another fabric being manufactured here.

For two years I have owned Angora rabbits from which I have plucked the soft, fluffy wool. In July I sent a quantity of it to Dublin, Ireland, and six weeks later received a piece of cloth as well as skeins of yarn and a sweater made of Angora rabbit wool. These products were exhibited at the Topsfield Fair rabbit show.

I am, without much doubt, the only woman in Essex County to have performed this novel experiment.

The yarn is soft, and garments made from it are light and warm and do not irritate the skin. The fabric known as Angora Tweed is durable, yet beautiful. It is practically waterproof.

The industry of raising and manufacturing Angora wool has possibilities, as this county is an ideal one for rabbit raising. The climate is conducive to good fur quality, and natural rabbit food abounds on all our farms. The wool might be raised by one group of women, while another group might spin and weave.

Along with Angoras I raise Chin-chellas and Silver Martins, chiefly for their pelts.

I wonder how many people realize that beautiful fur pieces are being raised, manufactured and worn right here in our own county?

When people buy these they know they are buying rabbit fur. No one is being misled. They are paying a fair price for the garment and the fur farmer is getting paid for his labors.

In my business the meat is the by-product. This I process in glass jars and sell. It is very delicious and it is not as expensive as is generally supposed.

The following recipe for the use of rabbit meat is easily prepared and served.

Rabbit "Sweet Breads"

Soak fresh-dressed rabbit in water to cover—2 hours.

¼ cup of vinegar should be added to the water.

Rinse rabbit in clear water.

Simmer in water to cover 1½ hours—
or until just tender enough to be removed from bones.

Cool, drain, simmer down liquor.

Remove meat from bones, breaking sections as little as possible.

Dip pieces in egg and crumbs and brown in butter.

Serve hot.

Surplus liquor may be used as gravy. A delicious broth may be served as first course, or it may be processed and kept indefinitely.

Canned rabbit is ideal prepared this way, simply dipping in egg and crumbs and frying.

Join the County Rat Campaign

Get ready for the biggest drive in history against the destructive rat, the worst mammal pest in the world. The campaign will be staged, county-wide, on November 14. After County Agent P. C. Smith had talked over the rat problem with Mr. E. M. Mills, a specialist on rodent control of the U. S. Biological Survey, it was decided that the only successful way to rid the county of rats was to organize the entire county. "Individuals in attempting to control rats do not keep up with their birthrate," says Mr. Mills, "but everyone working together will give permanent results."

Freshly prepared baits will be furnished at actual cost. Powdered red squill will be used as the poison, the newest development in rat exterminators. And remember, it only kills rats, the safest poison known to science. The baits will be complete, ready to use, nothing more to add.

Further details will appear in the next issue. Tell your neighbors about it, and urge them to get rid of their rats while you destroy yours. Don't forget to order the bait when the time comes.

Comparisons

Does it cost more to produce milk in Essex County than in northern New Hampshire?

I have the June report of the Coos County, New Hampshire, Cow Testing Association. Read the two figures for that association compared with Essex County, Massachusetts, June report: Mass., N. H.

Feed cost per lb. butterfat	.43	.163
Feed cost per cwt. milk	1.53	.60
Average price received for cwt. milk (at farm)	3.50	2.83
Returns for \$1.00 expended for feed	2.29	4.70
Net returns above feed cost	1.97	2.23

Their low costs were largely due to the fact that cows were on pasture and little grain was fed.

Watch the costs of feed.

—F. C. SMITH,
County Agricultural Agent.

DID YOU KNOW?

I wonder if you know
Just how fast a rat will grow?
Do you know in every litter
There are ten or even better?
And did you ever hear
That eight litters in a year
Is the number that will come
And around your house will run?
So, now then, just take a tip!
Just go to it! Do your bit!
'Clean the county of this pest,
Do your bit—we'll do the rest.

SUMMARY OF WEATHER OBSERVATIONS

MAY TO AUGUST, 1930

	May	June	July	August
Max. temperature	91 (7th)	91 (4th)	92 (18th)	96 (3rd)
Min. temperature	36 (11th)	36 (1st)	48 (16th)	44 (12th-13th)
Mean daily temp.	56.5	68.9	69.5	67.1
5-year ave. ('25-'29)	54.0	63.8	69.5	67.1
Greatest daily range	42°	41°	33°	30°
Least daily range	4°	5°	7°	5°
Precipitation	3.24"	3.03"	3.27"	2.31"
5-year ave. ('25-'29)	2.55"	3.11"	2.43"	3.62"
Total to Sept. 1	....	....	....	21.03"
Deficiency to Sept. 1	....	....	....	—4.02"
Ave. relative humidity				
8 a. m.	77.3%	76.5%	79.6%	77.4%
No. days rain fell	11	8	9	9
No. clear days	13	15	15	16
No. partly cloudy days	7	9	11	11
No. cloudy days	11	6	5	4
Total hours sunshine	230.5	275.0	286.5	273.0
Per cent sunshine	50.9%	60.2%	61.9%	63.5%
Total hours to Sept. 1	....	....	....	1774
4-year average, '26-'29	....	....	....	1791

It is interesting to note that while the year to date has been on the whole a dry one, yet the rains of the summer have been so well distributed that most crops have suffered little and it has been for the most part a satisfactory growing season. May and June averaged somewhat higher than the five-year period, but July and August were normal. There has been an accumulation of 330 degrees of excess temperature compared with five-year average '25-'29 inclusive, more than 150 of these occurring in June.

—HAROLD A. MOSTROM.

More Towns Appoint Community Extension Committees

In addition to the Community Extension Committees published in the August issue, we are glad to add the following:

Amesbury—Mrs. Bernard Manning, chairman; Mrs. Jonas Merchant, Mrs. Harrison Eaton, and Mrs. John J. Burke.

Ballardvale—Mrs. W. E. Curtis, chairman; Mrs. Samuel Moody, and Mrs. George Brown.

Cliftondale—Mrs. Gertrude Amidon, chairman; Mrs. Lillian Russell, and Mrs. T. A. Marsden.

Groveland—Mrs. George Mitchell, chairman; Mrs. Albert H. Amazeen, Mrs. Gardner Wood, Mrs. Harold W. Parker, and Mrs. Alfred P. Nelson.

Newbury—Mrs. Bertram Savage, Mrs. Ernest Dover, and Miss Laura Humphreys.

South Groveland—Mrs. Frank N. Spofford, chairman, and Mrs. John Garrity.

West Andover—Mrs. John W. Henderson, chairman; Mrs. Raymond Cooper, and Mrs. Leon Hardy.

West Haverhill—Mrs. Ralph K. Porter, chairman; Mrs. D. W. Reynolds, and Mrs. Howard F. Marshall.

West Newbury—Mrs. E. Spencer Poore, chairman; Mrs. Horace Brown, and Mrs. Marshall Bacheller.

South Lynnfield—Mrs. N. D. Herrick, chairman; Mrs. H. E. Maynard, Mrs. R. A. Stewart, Mrs. Harold Trearmer, Mrs. George Cornet.

Homemakers' Creed

During Farm and Home Week, held at Massachusetts Agricultural College in July, one of the pleasantest parts of the program was the homemakers' dinner, which was held at the Manse in Northampton. Essex County was represented by Mrs. C. S. Wright, Mrs. H. A. Mstrom and Mrs. H. L. White of Danvers, Mrs. Ruth Reed of Swampscott, and the Home Demonstration Agent. At this time the Homemakers' Creed, inspired by the homemakers of the State, was presented. The creed is printed in this issue.

Plans For Fall Projects Well Under Way

During the month of August, the Home Demonstration Agent has held conferences with the Community Extension Committee or the Town Chairman of 27 communities in the county. Tentative plans were made for fall projects as follows:

Home Nursing—Saugus, Middleton, Newbury, Amesbury.

Better Kitchens—Amesbury, Salisbury, Merrimac, Newbury, Rocks Village, Ballardvale, Shawsheen, West

Andover.

Home Furnishing—Rockport.
Furniture Renovation—Lynnfield Centre, Ballardvale.

Garment Making—South Groveland.
Clothing Selection—Marblehead.
Children's Clothes—Georgetown.

Garment Finishes—West Haverhill.
Community Meals—Everly, Saugus, Amesbury.

Not all communities have completed plans. In our October issue we will publish a complete list, together with names of project leaders.

—MARION P. CRAWFORD,
Home Demonstration Agent.

MY HOME

I want to build a home which shall find its fullest expression and satisfaction in the creation of human life. In my own living I want to exemplify physical vigor, intellectual strength, and spiritual power, so that my children may have standards to guide them on the road to right living. I want to keep my mind open to new ideas, so that all members of my family may grow to the full stature of their capacities.

I want to share with my friends and neighbors whatever I have learned in the workshop of knowledge and practice. This I shall do with courage and willingness, realizing that through my influence I may strengthen other homes and thereby make my own a larger power for good.

—Inspired by the
Homemakers of Massachusetts.

Ready-made and Home-made Garments

Irene Fagin, home demonstration agent of Butte County, California, says in her annual report: "The demonstrators who made a comparative study of the ready-to-wear garments, carried on various demonstrations. Some of them made comparisons of costs of dresses for girls of high-school age, which resulted in the following conclusions being drawn:

1. The cheaper the dress the less was actually saved in making it at home.

2. When a little money was saved in making a cheap dress, the quality was slightly better. Most of the demonstrators believed that if a person was very busy the saving was not sufficient to warrant the time spent in sewing.

3. The value of each dress depended somewhat on whether or not the individual to wear it was easy to fit. Some of the women said they spent as much time and effort in trying to

get a ready-to-wear dress that would fit as they did in making one.

4. Most of them thought that there was a definite saving in making young children's clothing.

5. Figuring hours in making and the difference in price between home-made and ready-made garments, the demonstrators estimated that the amount they earned by making garments at home varied from 8 cents per hour to \$2.50 per hour.

Winter Vegetable Garden

Prepared by MAY E. FOLEY,
Nutrition Specialist.

With so many vegetables now plentiful in the garden and market, the good housewife says longingly, "If we could just have more of these for winter!" She has canned a good many, and is planning to store some, and still she is looking about for other ways of preserving them.

One very good suggestion for a one-dish meal is contained in the Garden Special recipe.

Garden Special

- 4 quarts ripe tomatoes
- 1 quart celery
- 1 quart onions
- 6 sweet peppers
- 3 tablespoons salt
- ½ teaspoon black pepper
- 2 tablespoons sugar

Dice peppers, onions and celery (coarse stalks and leaves may be used), and cook together for 20 minutes. Add tomatoes which have been peeled and cut up, seasonings, and cook for 10 minutes after it all comes to a boil.

Put into hot jars, and cook in hot water for a half-hour.

In the winter, use as follows for one-dish meal:

- 2 cups Garden Special
- ½ pound ground steak fried, or scraps of cold meat
- 2 cups cooked spaghetti, rice, or cold diced potato

Put in layers in baking dish and cook in oven until hot through. This serves four. With bread and butter, a drink, and a dessert, such as custard pie, plain custard, bread pudding, or cake and sauce, this makes a satisfying meal.

Cold Catsup

One peck of ripe tomatoes peeled cold. Chop not very fine and add one cup salt. Let stand over night, then drain off all the juice. Add:

- 1 cup chopped onions
- 2 cups chopped celery
- ½ cup white mustard seed
- 2 cups sugar
- 1 cup grated horseradish
- 1 teaspoon ground pepper
- 2 teaspoons ground cinnamon and cloves
- 3 pints vinegar

Mix well and put in stone crock. This will keep without sealing and is not to be cooked.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 11

HATHORNE, MASS., OCTOBER, 1930

NO. 10

Graduate of 1918 Helps Others in Gardening

The subject of this month's graduate writup is Harold Clifton Stevens, Class of 1918, who has spent twelve years in one line of work since graduation. This length of time is sufficient to satisfy the most skeptical vocational investigator.

That Mr. Stevens should take up gardening was quite natural, in as much as his father and two brothers are engaged in similar work. It may be said that gardening "runs in the family." No doubt he inherited some ability for this kind of work, but he realized the value of training and entered this School in 1914, taking a floricultural course.

He is now doing work for which he is especially trained and which is particularly agreeable to him. The natural result is, therefore, a happy life in working with plants and flowers successfully.

That he likes his work is borne out by the fact that he never refuses an opportunity to encourage others in making and caring for gardens. He has written a series of articles on floriculture and ornamental gardening which is a weekly feature of a local newspaper. He has addressed many of the garden clubs in this vicinity and his advice on flower gardening is eagerly sought. He was one of the speakers at the Annual Conference of the Massachusetts Federated Garden Clubs, held January 30, 1930, at the Hotel Statler in Boston.

In addition to helping adults with their gardening problems, Mr. Stevens has helped many boys and girls to grow vegetables and flowers. He has accomplished much by co-operating with the playground movement in Salem. He visits the gardens of the boys and girls and helps them display their products at the annual exhibition.

His main job is the maintenance and development of the beautiful gardens at the Ropes Memorial Mansion on Upper Essex Street, Salem. This estate is visited by hundreds every season and many are attracted by the beautiful gardens, planted and cared for by Mr. Stevens. His work at the Ropes Memorial brings him into contact with visitors from distant parts of the country, and al-

(Continued on page 2)



ESSEX COUNTY 4-H CLUB DELEGATES AND LEADERS

First Row, left to right—Margaret Bartlett, Rowley; A. Nancy Ordway, Groveland; Dorothy Lambert, Methuen; Harvey Turner, Jr., Andover.
Second Row—Mrs. Arthur Usher, Danvers, local leader; Miss Myra Smith, Methuen, local leader; Mrs. Leon Jordan, Groveland, local leader; Richard Mueller, Methuen; Robert Grant, Ballardvale.
Top Row—Horace J. Shute, County Club Agent; Arthur Gordon, Rowley; Silas Little, Jr., Newbury; Silas Little, Sr., Newbury, local leader.

County and State Delegates Attend Camp Gilbert

One hundred and eighty-two county and state 4-H Club delegates, local leaders, and county leaders attended Camp Gilbert, held at the Massachusetts Agricultural College, Amherst, the last of July. The illustration on this page shows the Essex County delegation.

In previous years the campers have slept in the Drill Hall and dormitories. This year tents were used, which added a realistic tinge to camp life.

There was a well-planned program which kept the campers busy every day throughout the week. The routine of the typical day was reveille at six o'clock, flag-raising at seven, setting-up exercises, followed by breakfast and morning assembly from 8:45 to 9:15. The remainder of the morning was devoted to classroom work. Each club member had the privilege of attending one of the following groups: garden, dairy, poultry, handicraft, canning, or home economics. The afternoon started off with a rest period, followed by group discussion under the leadership of junior leaders. These gatherings were

held to discuss problems of vital importance in club work. After the group discussion a recreational period followed, in which many new games and stunts were taught.

After supper everyone's thoughts turned toward the camp fires, which were held in the ravine. These camp fires were ideal for inspirational programs. The campers were seated in a circle around a large four-leaf clover, with a fire in each of the leaves and one large fire in the center.

During the week special programs were arranged for the campers. These included a trip to Mt. Sugarloaf, a picnic on Mt. Pleasant, baseball games, and a track meet.

The local leaders held daily sessions, in which they discussed various problems which they had encountered in their experiences as 4-H leaders. This group of about fifty men and women were very enthusiastic and took part in the track meet and put on an entertainment for the club agents.

The camp was brought to a close in the usual way with a candle-lighting service by our State Leader, George L. Farley, on the shore of the college pond.

—HORACE J. SHUTE,
County Club Agent.

Essex Farmer and Homemaker

HATHORNE, MASS.

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the Essex County Agricultural School

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CALENDAR

Nov. 14—Rat Control Campaign.
Nov. 18—County Extension Banquet.
Nov. 25—Graduation, Class of 1930.
Nov. 25 to Dec. 1—Thanksgiving Re-
cess.
Dec. 19 to Jan. 5—Christmas Recess.

Graduation and Reunions

The annual graduation exercises for the fifteenth class (Class of 1930) will be held at the Peabody Institute, Sylvan Street, Danvers, on Tuesday afternoon, November 25th, at 2:30 P. M. At this time the largest class, numbering over seventy members, will receive their diplomas.

The graduation exercises will be followed, in the evening, by the customary Alumni Banquet, reunions, and other events. One of the outstanding features of these exercises will be a reunion of the Class of 1920. Every effort is being made by its officers to bring back the largest possible percentage of members.

Enrollment

Recent compiling of the enrollment figures for the new school year have brought out some interesting facts. Once again Sangus heads the list with 42 students enrolled. The next highest enrollment comes from Peabody with 33, then Lawrence 31, Salem 29, and Lynn 27. There are four towns in the county which have no representation, namely, Georgetown, Merrimac, Nahant and Topsfield.

The total number of students regis-

tered in both departments of the School is now 384. Of this total, 246 are enrolled in the Agricultural Department and the remainder in the Homemaking Department. These figures include the Class of 1930, which will be the largest class ever graduated.

New Instructors

In order to complete the staff organization, made necessary by the resignations of Instructors William B. Moore, Grace A. Gilkey, Leona Waite and Doris E. Whittle, the following teachers have been appointed:

Miss Ethel M. Moore, formerly Head of the Foods Division, has been made Educational Manager of the Homemaking Department. To fill the vacancy caused by this promotion, Ruth Emerson, of Milford, New Hampshire, has been appointed Head of the Foods Division. She is a graduate of Simmons College and comes to us after several years in the schools of Winchester, Massachusetts. Backed by several years of teaching experience, Harriet M. Butman, a graduate of Nasson Institute, has been appointed to take charge of the student cafeteria. Barbara H. Burrell, who was graduated from the Framingham Normal School in the Class of 1930, was selected to teach science, chemistry and arithmetic.

John E. Miltimore, a graduate of the University of New Hampshire, and for several years agricultural instructor in the West Springfield High School, has been appointed as teacher of poultry, husbandry, and vegetable gardening.

Science Day

The Joint Assembly Committee announces that the Annual Science Day at Essex County Agricultural School occurs on November 7 this year.

Those of us who attended the Science Day Assembly last year recall with a great deal of pleasure the illustrated lecture given by Mr. Whitney of Danvers, Mass. This year the committee is trying to secure a speaker on popular science from one of Boston's educational institutions. Contests similar to those of last year are planned by the students of the school. There seems to be greater interest as a whole in exhibits of plant materials and other things of a scientific nature which lend themselves readily to such exhibitions.

The Science Department is confident that the exhibits and the talks this year will stimulate further interest in Science among the students.

—O. E. CARLSON.

Parents Visit Homemaking Department

The Homemaking Department is holding a series of "at homes" this fall, in order that the mothers and the teachers may become better acquainted. The first "at home" was held Thursday, October 2, from 2:30 to 4:30, and the mothers and friends from Danvers, Lynn, Salem and Beverly attended.

The second was held on October 16, and included the Salisbury, Byfield, Newbury, Newburyport, Swampscott, Manchester, Rockport, Peabody, Saugus and Middleton sections.

The date for the third has not been decided upon, but will include the mothers of the students in Haverhill, Bradford, Lawrence, North Andover and Andover.

Alumni Notes

James Silva, Class of 1924, and his brother Everett, a junior at this School, are developing an evergreen nursery on Granite Street, Rockport. James is a carnation grower for J. W. Forte of Reading.

The marriage of Carolyn Elizabeth Wilkins and Roger Putnam Hooper, both former students at this School, took place at the Maple Street Congregational Church in Danvers, on Saturday, September 6.

Fred Walker, Class of 1927, is a junior at the Kansas State Agricultural College at Manhattan, Kansas. He is specializing in economic entomology and during the summer months is employed by the University. Since enrolling at Kansas, Fred has received two scholarships.

(Continued from page 1)

though he may learn something from them, we believe that visitors to his gardens go away with much valuable information. This graduate is accomplishing excellent work in promoting interest in the growing of vegetables and flowers in Salem and vicinity.

Harold C. Stevens is the son of Mr. G. F. Stevens of Rockport, a well-known gardener along the North Shore for many years. He has two brothers, Raymond and Ernest, both engaged in gardening, and the former a graduate of Essex Aggie, class of 1922.

Mr. Stevens is a world war veteran, having served overseas with the 50th Infantry. In 1920 he married Ora F. Wilkins of Middleton. Mr. and Mrs. Stevens, with their two children, Eleanor and Constance, reside at 403 Lafayette Street, Salem.

Plans Now Complete For Rat Campaign

The stage is set for the big drive on rats over Essex County on November 14. Many individuals and dealers in the county are co-operating as distributors to make it convenient for everyone to obtain the poisoned bait. Look for the list of distributors elsewhere in this issue. A package will contain three kinds of bait: hamburger, fish, and cereal, which will make about 100 small baits, enough to cover the average farm or premises. If there are a large number of buildings or many rats, it is best to order double quantity. The actual cost of the ingredients, which is fifty cents, is being charged. The baits will be freshly prepared, all complete, ready to expose the night of November 14.

The Essex County Extension Service will send out a letter to every farmer on the mailing list, announcing the campaign. Farmers intending to order bait should mail the return card with the information requested before November 12, or telephone Danvers 50.

One of the special features of the poison we use, *poisoned red squill*, is that it does not seriously endanger domestic animals. It has not been known to kill dogs, cats, chickens, or hogs. Red squill acts slowly, giving the sick rats a chance to reach their usual underground burrows to die. Therefore, few rats are found in the open and little odor results. Plan now to join the rat campaign.

—E. C. SMITH,
County Agent.

Tell your neighbor, please explain
All about our rat campaign,
And his interest seek to gain
For the Extension Service.
If rats again show up on deck
And their career you want to wreck,
To do it quick and save your neck
Ask the Extension Service.

Distributing Stations for Rat Poison

The following list of grain dealers will act as distributing agents for rat baits during the campaign:

Ralph Frisbie, Smith Grain Company, Amesbury; John Shea, Andover; George H. Collings & Sons, Beverly; John Shea, Boxford; R. W. Ropes and Parker Grain Company, Danvers; Hopkins Grain Company, Essex; Hopkins Grain Company, Gloucester; W. H. Dewhurst & Company, Groveland; Hamilton, see Ipswich; Ellison Coal Company, 15 Middlesex Street, and J. H. Smith, 12 Hale Street, Haverhill; George H. Brown, Ipswich; John Shea, and H. Bruekman, 158 South

Broadway, Lawrence; Torrence Vary & Company, J. W. Day & Company, and Butman Grain Company, Lynn; Lynfield, see Lynn; Manchester, see Gloucester; Herman Davis Company, Merrimac; John Shea, Methuen; Essex County Agricultural School, Middleton; Newbury, see Newburyport; P. Cushing Company, Knight Grain Company, W. E. Minkson & Son, 27 Water Street, Newburyport; Marble-ridge Grain Company, North Andover; M. W. Ellis, 19 Walnut Street, Peabody; Rowley, see Ipswich; Rockport, see Gloucester; Marshall Grain Company, 49 Central Street, Salem; Salisbury, see Newburyport; Whitford & Brown, Melrose; Saugus and Swampscott, see Lynn; Essex County Co-operative Farming Association, Topsfield; Wenham, see Beverly; Bailey's Grocery, West Newbury; David Chase, Smithtown, N. H.; and Kimball Grain Elevator, Salem Depot, N. H.

How Much Per Hour?

The returns per hour of labor mean much to every farmer. It represents what is left as income after deducting all other costs, such as use of land, buildings, equipment, horse labor, seed, fertilizer, manure, interest, depreciation, and all other items of cost.

Average of Five Years (Cornell, 1924-28)	
Enterprise	Returns per hour
Poultry	\$0.47
Cows	.40
Potatoes	.99
Apples	.83
Alfalfa (commercial)	.78
Cabbage	.46
Hay (commercial)	.08

J. A. Roome, Lowell Street, Peabody, had a very excellent field of Sweepstakes corn for silage. The County Agent says this was one of the very best fields of silage corn he had seen this year.

Apple Storage

Records show that it pays more often to store apples in years when the United States crop is small than when it is large. The 1930 apple crop is estimated to be 30,784,000 barrels, or 5% below the five-year average. Although the New England apple crop is 20% above the five-year average, large New England crops have had in the past little effect upon the price in the Boston market.

Ideal apple storage conditions call for a dark room, temperature as near freezing (32 degrees F.) as possible, and humidity (amount of moisture in the air) as high as possible (80-90%).

In cellar storage during this season of the year advantage can be taken of the cold nights to lower the temperature by ventilation. The warm daytime air can be excluded by closing the ventilators. A large water evaporating surface, such as a well-sprinkled floor, will keep up the humidity of the storage room.

—C. M. Wood.

Beef Cutting Demonstrations

Oct. 30, 7:30 p. m.—Y. M. C. A. Hall, Lawrence.

Oct. 31, 1:00 p. m.—Homemaking Building, Essex County Agricultural School, for students.

Oct. 31, 7:30 p. m.—Homemaking Building, Essex County Agricultural School, for general public.

Mr. Hartzell, of the National Livestock and Meat Board, will be the demonstrator.

Corn Borer Control

Oct. 27, 2:30 p. m.—Essex County Agricultural School, for students.

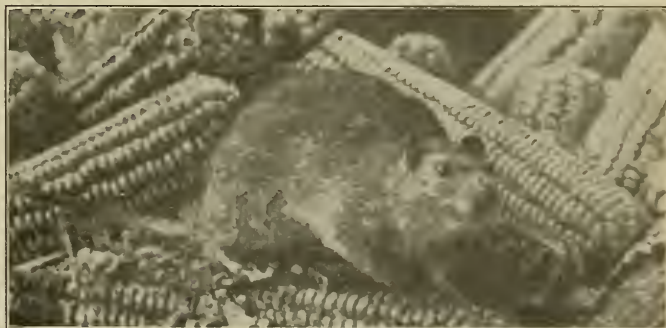
Oct. 28, 10:30 a. m.—Phillips Farm, Topsfield.

2:30 p. m.—Melville Grey, Wenham.

Oct. 29, 10:30 a. m.—Stuart Little, Newbury.

2:30 p. m.—Chauncey Gleason, East Broadway, Haverhill.

No Thanksgiving Dinner For Him This Year!



Many rats in Essex County will eat their last feast on November 14

Child Development Project Starts With Mrs. Ruth D. Morley of M. A. C.

Mrs. Ruth D. Morley, Child Guidance Specialist of Massachusetts Agricultural College, met the project leaders in the Child Guidance course for the first time October 10.

Mrs. Morley spoke of the importance of the early years in child development, as the home is the child's first school and the parents its first teachers. She emphasized, through many interesting illustrations, the three laws of learning: interest in the activity, opportunity for practice, and finally the satisfaction gained through achievement.

The following women will pass on to many mothers in their communities many of the helpful suggestions they received. The subject of the second meeting on November 7 will be, "Habits of Sleep."

Mrs. Robert Rose, Marblehead; Mrs. R. B. Hazard and Mrs. T. W. Billings, Lynnfield; Mrs. Doris Hobart and Mrs. B. H. Pingree, Cliftondale; Miss Marion Parker, Beverly; Mrs. G. C. Woodsum and Mrs. Lester Hatch, Saugus; Mrs. Raymond Cooper and Mrs. John Farrington, West Andover; Mrs. Linwood Kimball and Mrs. Geo. Cooley, Danvers.

—MARION P. CRAWFORD,
Home Demonstration Agent.

Better Kitchens for Essex County

Many women of Essex County will be studying their kitchens during the early fall and winter.

Mrs. Harriet J. Haynes, Home Management Specialist of Massachusetts Agricultural College, starts the ball rolling at the first meeting for leaders in the Newburyport Y. W. C. A., on October 24. The Home Demonstration Agent will conduct groups in other sections of the county.

The following women will act as project leaders and pass on interesting suggestions which they may receive to groups in their communities: Miss Elizabeth Ilsley and Mrs. Elmer Taylor, Newbury; Mrs. Edmund Bartlett and Mrs. Randolph Ackerman of Salisbury; Mrs. Frank Rand, Merrimac; Mrs. Leonard Kimball and Mrs. Edmund Swett, East Haverhill; Mrs. Harrison Eaton and Mrs. A. F. Huyler, Amesbury; Mrs. Walter Curtis and Mrs. Samuel Moody, Ballardvale; Mrs. John Henderson and Mrs. Leon Hardy, West Andover.

—MARION P. CRAWFORD,
Home Demonstration Agent.

Noon Lunch is a Problem in Every Rural School

Food service in Massachusetts rural elementary schools is the subject of a study made by Esther Davies, in charge of Home Economics Research at the Agricultural Experiment Station, Amherst. Miss Davies and her assistant studied conditions in 222 rural towns. The pupils in these towns were housed in 800 school buildings. Of the 57,600 pupils, 16,000 remain at the school houses during the noon recess.

Miss Davies investigated the amounts and kind of food service in the 800 school buildings. In 567, or 71%, there was no food service of any kind during any part of the year. In 185 buildings, or 23%, hot drink or soup was served during the winter, in 23 a meal was served for the entire school year, and in 25, milk was served for the entire school year. In 13 of these milk was served at mid-morning and in 12 at noon.

That a real problem is involved in these figures is indicated by a supplementary study of causes of absence. "Indigestion is a leading cause of absence among school children, and a study of the records of 470 children for eight consecutive months showed a greater incidence of absence on account of stomach upsets among the pupils remaining at the school house for lunch than among those going home."

Miss Davies' studies of types of service contain much of value for those facing the problems of school feeding. The bulletin from which we have quoted is No. 263 of the Mass. Agri. Experiment Station and will well repay careful perusal.

It is Easier to Prevent Than It is to Cure

A homely old proverb says "What is sauce for the goose is sauce for the gander" or words to that effect. Our October child feeding letter for which May E. Foley, extension nutritionist, provided the information, contains advice just as applicable to fathers, mothers, aunts and uncles, big brothers and sisters, as to little folks.

Miss Foley suggests that by starting early in the fall it is possible to keep the children free from minor physical ills. Colds, indigestion, constipation, and similar disturbances may be greatly reduced by a little thought and care.

1. As much sunshine as possible during the fall and winter months.
2. Fresh air, indoors and out.
3. Plenty of water.
4. Plenty of rest.
5. Cod liver oil.
6. Simple, nourishing foods—milk,

Local Leaders to Meet

The first annual meeting of the Essex County Local Leaders Association will be held at the Essex Agricultural School on Saturday, November 8, 1930, at 2:00 p. m.

The committee is working on an inspirational and educational program that will answer many general club questions and suggest new ideas to be worked into club meetings.

Along with the general meeting the County and State Leaders will discuss their goals for the coming year. The interest in the Local Leaders Association has been steadily increasing and many new leaders will be cordially received this year.

—HORACE J. SHUTE,
County Club Agent.

4-H Club Notes

October marks the completion of 4-H activities for the season of 1930. New clubs are being organized now and will be prepared to start work November 1. The projects in which clubs are being organized are: clothing, food, supper, and room improvement clubs for the girls; and handicraft, poultry, forestry, and dairy clubs for the boys. Club members are urged to enroll before November 1st.

Do You Own \$200 Cows?

Does it pay to pay more than the average for milch cows? This question has been raised by dairymen so many times that the County Agricultural Agent decided to study the records of the Cow Test Association.

A total of 255 cows were inspected and appraised by the owners and the County Agent during the winter of 1929 and 1930. The prevailing prices then were much higher than now (October, 1930), yet the comparative values are the same.

Only cows in milk eight months or more were included in the summary. It was found that only cows costing over \$175 paid a real profit. Generally records show that total feed cost represents one-half the total cost. This includes interest, depreciation, labor, etc. Cows generally valued at less than \$175 did not return a real profit.

IT PAYS TO PAY MORE

Value of cow	Lbs. milk yearly	Net profit	Percent of cows profitable
\$99	4711	\$27 loss	16
\$139	5527	\$20 loss	20
\$172	6921	\$1 loss	64
\$197	7970	\$34 profit	81
\$235	9575	\$64 profit	92
\$295	10200	\$77 profit	85
\$378	11875	\$148 profit	98

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 11

HATHORNE, MASS., NOVEMBER, 1930

NO. 11

Farm Bureau Convention Boston, December 5 to 11

Only a few days to the great American Farm Bureau Convention in Boston. Delegates from all over the country are even now laying their plans and packing their bags for a week of pleasure and sightseeing, interspersed with important Farm Bureau business, which they will spend in the Hub, December 5th to 11th.

Vermont promises to send at least 150 delegates, Connecticut has 125 coming, a bus train containing 150 will roll down from New Hampshire, New Jersey will provide 100, New York states that they will have a delegation from every county in the state, Maine and Rhode Island will furnish guests also. Outside of the East, delegates are expected from every Farm Bureau state in the Union, ranging from California to Alabama.

Hotels are making special preparations for the guests and in many cases have made special rates.

Arrangements have been made for special rates for storage of cars during the Convention.

Convention headquarters is the Hotel Statler. Every guest should go to the Statler mezzanine floor and register as soon as he arrives in Boston. There he will receive a program and a book of tickets entitling him to special garage rates, free sight-seeing tours, a badge, a program and information to make his stay profitable and pleasant.

FARM PRODUCTS DISPLAY TO BE FEATURE

One of the features of the Convention will be a Tercentenary display of New England farm products, to be held in Horticultural Hall under the direction of the Departments of Agriculture of the New England States. The suggestion for this exhibit came from Dr. Arthur W. Gilbert of Belmont, Commissioner of Agriculture in Massachusetts. A. W. Lombard of Ar-

(Continued on page 2)

Graduation Exercises

Tuesday, November 25, is the date set for the graduation exercises of the Class of 1930. The class is a large one, numbering over seventy.

The exercises will be held in the Peabody Institute Hall, Sylvan Street, Danvers, and will begin at 2:00 p. m. Original essays pertaining to agriculture and homemaking will be given by five members of the graduating class. The School Orchestra and Glee Clubs will also take part in the program. Mr. Ralph S. Bauer, President of the Board of Trustees, will present the diplomas and Director Fred A. Smith will present the prizes awarded for excellence in agriculture and homemaking projects.

Following the graduation exercises the annual business meeting, banquet and dance of the Alumni Association will be held at the School.



CLASS OF 1930

Front Row—E. Boisclair, E. Belair, M. Bowley, M. Tweedy, S. Trojanowski, I. Bubier, Miss Moore, Mr. Meigs, M. Callan, B. Walsh, L. McKenney, F. Seymour and K. Connelly.

Second Row—A. Pickles, O. Sidley, S. Wozniak, K. Isley, D. Rogers, E. McGlew, M. Thibedeau, M. Pohju, M. Gordon, M. Stoss, B. Willard.

Third Row—D. Spofford, D. Ackerman, I. Murray, R. Kirby, F. Fielder, E. Flye, J. Bartlett, R. Fulkerson, and N. Sullivan.

Fourth Row—V. Marquis, E. Richards, H. Marr, E. Stott, M. Burton, D. Gordon, L. Jameson, H. Curtis, H. Fabieski, E. Hadley, and H. Budd.

Fifth Row—H. Kirk, G. Barbeau, C. Dort, D. Henderson, E. Blake, A. Foley, E. Blaney, O. Gauvin, H. Gilman, A. Dalton, T. Marsden, O. Woodman, and D. Williams.

Sixth Row—W. Shiers, C. Elwell, B. Brown, A. Kolhonen, L. Alward, J. Bruce, I. M. Perkins, R. Daggett, R. Peabody, and A. Svininarski.

Seventh Row—H. Henderson, R. Saunders, J. Sturtevant, L. Knowlton, C. Bryer, F. Ellis, and J. Forrest.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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CALENDAR

Nov. 14 and 15—Judging at Massachusetts Agricultural College.
Nov. 25—Graduation Day.
Nov. 25—Alumni Reunion, Banquet
and Dance.
Nov. 25 to Dec. 1—Thanksgiving recess.
Dec. 19 to Jan. 5—Christmas recess.

Classes Vote Funds to Extend Concrete Sidewalks

The triangle made by the extension of the two asphalt walks which formerly led to the steps of the old mansion house, and the walk leading to the rear door of the new Homemaking Building will be completed this fall.

This year's graduating class (1930) is continuing the walk on the side of the triangle leading from the Homemaking Building to the Main Building. The stretch will also extend down a little way on the other side of the triangle.

The class of 1931, this year's senior class, and the class of 1928 have already voted to supply funds to complete the side nearest the roadway.

These walks are all five feet in width, but it is expected that the walk which will continue in succeeding years towards the main building will be six feet in width, as is the main walk.

Mr. Tor Torsen, father of Mrs. Stewart Ireland (nee Grace Torsen, '29), is supplying the brass numerals for the classes.

The Farm Shop classes, under Instructor Hardy, are figuring the job and laying the cement as a class exercise.

The class of 1929 was the first class to donate funds for a strip of sidewalk, in which was placed their numerals. The idea was a good one. It is hoped that all succeeding classes will find it possible to continue this good work.

—G. A. MEIGS.

Juniors Take Annual Market Trip

Traveling in two busses, the forty-two members of Mr. Meigs' marketing class arrived at Dock Square at 4:00 A. M. on October 21, to visit the Boston markets.

They visited the following places in the order named:

The Farmers' Curb Market on South Market street, near Faneuil Hall.

The Boston Flower Exchange, 539 Tremont street.

The Boston Market Terminal Company 12 House Fargo street.

The Boston Fruit Auction on Rutherford avenue, Charlestown.

The H. P. Hood Milk Plant, 500 Rutherford avenue.

The Eastern Avenue and T-Wharf Cold Storage Houses of the Quincy Cold Storage Company.

The Boston Fruit and Produce Exchange Rooms over Faneuil Hall.

The Batchelder, Snyder, Dorr & Doe Company, 55 Blackstone street.

Instructors Stearns, Thurlow, Milmore, Forman and Couhig also accompanied the class.

The first four stops were so timed that the boys saw these markets open for the day. They illustrate the various ways of selling the farmer's products in their natural state in a large primary market.

The other stops showed some of the manufacturing steps through which a part of the products go, and the value of refrigeration in keeping food.

—G. A. MEIGS.

Poultry and Fruit Trip

The Senior poultry and fruit classes under the supervision of Instructors Bennett and Wood visited the following poultry and fruit farms on October 21: Homer Rowell's Farm, Groveland; Long Hill Orchard, West Newbury; Applecrest Farm, Hampton Falls, N. H.; and Bittersweet Farm, Stratham, N. H.

Dairy Trip

On October 21, Mr. Eastwood's advanced dairy class had the pleasure of visiting the Brighton Stockyards and nearby horse sales stables. Mr. White, the veterinarian in charge of the milch cow barns at Brighton, gave a very interesting and instructive talk.

Football, 1930

The Essex Aggie football team, under the guidance of Physical Director Couhig, has had a successful season, winning four of the five games played to date. The team has defeated Methuen, Swampscott, Peabody, and St. Joseph's Juniorate, losing only to Marblehead. Games yet to be played are Gloucester and Dummer Academy. The team line-up in most of the games, has been as follows:

Reed (Capt.)	l. e.	Morehouse
Bulgaria, J.	l. t.	Lawn
McCourt	l. g.	Graf
Mahoney, J.	c.	Batchelder
DeLuca	r. g.	Bentley
Bulgaria, A.	r. t.	Smith, G.
Roland	r. e.	Poirier
Chlebowski	q. b.	
Silva	r. h. b.	Ellis, J.
Colville	l. h. b.	Williams, L.
Johnston	f. b.	Perkins

Armistice Day

Armistice Day was observed on Wednesday, November 12, with a program of patriotic speeches and songs. Preceding the assembly program, the presidents of each of the four classes in the Agricultural Department decorated the four memorial boulders on the School Campus. The exercises were in charge of Instructor Thurlow.

Social Events

The Junior Class entertained the faculty and student body at a Halloween Party in the auditorium on October 31. A series of one-act plays presented by members of the class was followed by dancing.

(Continued from page 1)

lington, who has been so successful in managing other similar exhibits, will be in charge. This display will be open to the general public. It will show New England fruits, vegetables, poultry products, canned goods, and every variety of agricultural production.

An interesting display of agricultural antiques will be found in the hall also. Ancient plows, harrows, hay forks, kitchen utensils, and similar articles, will be arranged by a committee headed by Raymond L. Clapp, manager of the Middlesex County Farm Bureau.

All the details of the convention are under the direct supervision of Howard S. Russell, Secretary of the Massachusetts Farm Bureau Federation, with the assistance of Raymond L. Clapp and George A. Cotton, Assistant Convention Directors.

Annual 4-H Local Leaders' Meeting

The Essex County Local Leaders' Association held its first annual meeting at the Essex County Agricultural School on Saturday, November 8.

Mr. George L. Farley, State Club Leader, and his four assistants, met with sixty local leaders, junior leaders, and older club members, to discuss 4-H Club problems and the program for the coming year.

The business meeting opened with Mr. Silas Little of Newbury presiding. A very interesting report of the progress of the Association was presented by the secretary, Mrs. Leon E. Jordan.

A report of the Topsfield Fair exhibit and lunch counter was made by Horace J. Shute, County Club Agent, and plans were submitted for improvements for next year. Some of these are: to have a large delegation of 4-H Club members at the Fair on Saturday for a club rally; to have a tent provided near the 4-H building for the purpose of housing the livestock, so that all the 4-H exhibits will be in one place.

A 4-H Camp in Essex County was next presented for discussion by the Chairman. Mr. Shute stated that out of our state camps there is a very small percentage of Essex County club members represented. We have at Camp Field at Brockton Fair two delegates: Camp Gilbert, at Massachusetts Agricultural College, Amherst, seven delegates, and Camp Vaile, at Eastern States Exposition, one or two delegates. These few delegates are expected to convey the inspiration from the state camps to the boys and girls in their respective communities. The impression made by these delegates on the 1,400 club members in Essex County is of very little value, as they merely reach the few people in their home communities. Such a camp as could be established in Essex County would enable one club member from every community to attend, hence conveying the club spirit into all the clubs rather than a few.

The Association re-elected Mr. Silas Little of Newbury, Chairman; Mr. Arthur Usher of Danvers, Vice-Chairman; Mrs. Leon Jordan of Groveland, Secretary, and Charles Nason of Ballardvale, Treasurer. After the business meeting, the group enjoyed a series of games to be played at club meetings, directed by Miss Marion Forbes, Assistant State Club Leader.

Following the recreation period, the group was divided into subject-matter classes conducted by the state leaders. The girls' projects were headed by Miss Helen Doane on food and Miss Marion Forbes on clothing. Mr. Harley Leland headed the handicraft and livestock group, and Mr. Earle Nodine the poultry and vegetable gardening. At the same time Mr. Farley con-



MASSACHUSETTS STATE 4-H CLUB LEADERS

From left to right—H. A. Leland, Helen Doane, George L. Farley, Marion E. Forbes, Earl Nodine.

ducted an inspirational program with the younger club members, bringing out the value of 4-H Club work and stressing the importance of being a real 4-H Club member and living the 4-H Club pledge.

After the group discussion, a supper was served by the Homemaking Department of the School, followed by an excellent talk by Mr. Farley, commending the Association on its accomplishments and the fine spirit carried on throughout the county. Club leaders were present from Andover, North Andover, Boxford, West Newbury, Newbury, Ryfield, Methuen, Merrimac, Newburyport, Rowley, Gloucester, Beverly, and Danvers.

—HORACE J. SHUTE,
County Club Agent.

Rat Campaign

The Young Farmers' Association cooperated with the Essex County Extension Service and U. S. Department of Agriculture in conducting a rat extermination campaign on Friday, November 14, 1930. The members of the association assisted in preparing and distributing the bait to local grain dealers of the county, who sold the bait, at cost, to farmers who intend to rid their premises of rodents.

—HAROLD BOWEN,
Reporter.

Staff Club

The staff club held a costume party on Friday evening, October 31, at the School. The program of entertainment, consisting of Halloween stunts and games, was in charge of the Office Staff.

Cull Trees Make the Best Firewood

A given volume of wood from the cull trees will give more heat than a like volume of wood from vigorous, fast-growing young trees. By cull trees is meant those trees which have been, or are being crowded out by the larger and more vigorous trees; they are weak and slow-growing. They have a much greater percentage of heartwood and a lower percentage of sapwood than the fast-growing, vigorous crop trees. This means greater weight to the cubic foot. As a general rule, the heavier the wood to the cubic foot, the greater its value for fuel.

Bear this in mind when you are cutting the winter's supply of firewood. It may be easier to cut the fast-growing, best-looking trees, and the wood may cord up faster, but when it is dry and ready to burn, more has to be used than if you harvest the culls and allow the better trees to grow into lumber.

Young Farmers' Notes

The annual election of the Young Farmers' Association was held on October 23, 1930. The following officers were elected for the ensuing year:

President, Lawrence Westcott, Melrose; Vice-President, Donald Bentley, Methuen; Secretary, Robert Bartlett, Beverly; Treasurer, Milton Snow, Lawrence; Reporter, Harold Bowen, Ipswich; Faculty Advisors, J. E. Eastwood and E. E. Metcalf.

Better Kitchens in Essex County

Meetings are being conducted in ten communities in the Better Kitchens project. Nearly 200 women enrolled at the first meeting. Other communities will carry this project later in the year. Color in the Kitchen, the subject of the first meeting, proved a fascinating one to all homemakers attending. At the second meeting kitchens will be scored.

School Lunch Projects Start in January

"Pa warms the milk for the little calf,
Ma heats the food for the chicks;
They have hot dinner at noontime,
too,
But my lunch is as cold as bricks."

"What shall we put in the school lunch?" is asked by countless mothers every day, and they do not need to be told that this is the most difficult meal of the day to plan for.

Those of you who have asked for help in preparing school lunches will be glad to know that beginning in January a two-meeting project will be launched in several sections of Essex County.

Miss Foley, Nutrition Specialist, has prepared two of her helpful and attractive outlines, and will hold her first meeting for leaders on January 27. Any mother who wishes to become a group member should notify her town chairman or the Home Demonstration Agent as soon as possible.

Letter Service to Mothers

During the year 1930, Child Feeding letters prepared by Miss Foley, Nutrition Specialist, have been sent out to 950 mothers in Essex County.

During 1931 these letters will give suggestions not only for child feeding, but aid will be given in child development, self-help, garments, and home conveniences for the children. If you would like your name put on our mailing list for this letter, notify the Home Demonstration Agent, Essex County Agricultural School, Hathorne, Massachusetts.

The Well Dressed Family

Marblehead, Georgetown, South Groveland, Salisbury, and West Haverhill are studying the clothing problem, both for adults and children. Mrs. Esther Cooley Page, Clothing Specialist of M. A. C., started the Clothing Selection meeting in Marblehead on October 30. This course is

sponsored by the Marblehead Woman's Club, but all women from Marblehead and surrounding communities are invited to attend. The second meeting will be held November 20. South Groveland and Salisbury are making dresses, while West Haverhill and Georgetown study garment finishes and children's clothing.

Is Sleep Important in the Child's Life?

The eighteen leaders in the Child Development project studied the importance of sleep in the child's life at their second meeting. Mrs. Morley says:

"Almost half of the time during the early years is spent in sleep; more than the time spent in any other one activity. Time to begin to train the child in wholesome habits and attitudes toward sleep is at birth, so that his sleeping behavior early becomes as natural and matter-of-fact as possible. Normally, children should go to bed willingly and happily, sleep soundly an adequate number of hours, and awaken refreshed and eager for the day's activities. Many fall far short of this ideal behavior.

In handling any one of the problems the first thing to ask one's self is what is wrong with the situation and methods used which calls out the undesirable behavior.

Regularity is the first consideration. Does the child have a regular time to go to bed and to get up, which allows him ample time to get in the full amount of sleep necessary for a child of his age and type?

Is the child himself physically and emotionally ready for sleep?

The child should go to bed calm and happy, and not irritated, unhappy, worried, or upset emotionally.

Does the child have the right attitude toward sleep?

As soon as possible the independence of the child should be developed. Sooner than most people realize, the child can climb into bed, get out of bed, pull up the covers, and other little steps which will increase his feeling of personal responsibility.

The conditions in which the child sleeps should have much consideration. A well-ventilated room for each child is ideal, but not always possible. At least a bed of his own should be each child's heritage."

Inter-class Track Meeting

On November 3rd, the inter-class track meet was held at the school. Most of the students from both departments participated in the following events:

1. Chinning the bar.
2. 100-yard relay.
3. 100-yard hurdles.

4. Dodge ball (girls).
5. Shot-put.
6. High jump.
7. Running broad jump.
8. Relay (girls).
9. Ball relay (girls).

The Seniors won the meet with a score of 40 points; the Juniors were a close second with 38 points; Sophomores scored 7 points; high school specials, 4 points; and Freshmen, 1 point.

Fruit Judging Team Holds Cup

Three teams representing the Essex County Agricultural School judged live stock, vegetables and fruit at the Massachusetts Agricultural College in Amherst on November 14th and 15th.

The fruit-judging team captured the first place among fifteen competing teams. The trophy, a large silver cup, now becomes the permanent property of the Essex County Agricultural School, having won it three times. Bradford Webb of Andover secured individual second prize, a silver medal; Sidney Batchelder of Andover, third prize, a bronze medal; and Jack Ellis of Peabody was the third member of this excellent team.

Alumni Notes

AGRICULTURE

Word has just been received in the office of the marriage of Miss Annie Mae Dickinson '29 to Mr. Thomas H. Kittredge. Mr. Kittredge is an electrician in Salem, N. H., and we understand that the couple will reside there.

A recent letter from Harold C. Downing '25 tells us that he is now in full charge of the poultry department at the Whiting Farm in Holyoke.

Richard Ashton '25 has visited the School recently, having just finished his summer's work as fire warden in New Hampshire forests around Mt. Monadnock.

Kenneth R. Leighton '26 tells us that he is now connected with the Joseph Tetley Tea Company. He is living at Clarendon street, Springfield.

Peter Pasukonis '28 is in charge of the ice cream department of the United Dairy System in Springfield, Massachusetts.

Henry G. Roberts '29 is working at the Pond Nurseries at Clinton, Mass.

William L. Wilson '28 visited the School recently. He is at present recovering from an accident to his foot.

HOMEMAKING

We have recently heard of the following marriages:

Miss Esther Perkins '28 and Mr. Joseph D. Ferris were married on September 22, 1931.

Miss Marjorie E. Tweedy of the 1930 class was married in October to Mr. Gordon Willis.

ESSEX FARMER AND HOMEMAKER

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VOL. 11

HATHORNE, MASS., DECEMBER, 1930

NO. 12

Prize Winners for 1930

On November twenty-fifth, at Commencement exercises, Director F. A. Smith presented the following awards:

The R. S. Bauer Awards for Excellence in Agricultural Projects:

First—Richard Heider, North Andover, \$20.00.

Second—Lawrence Westcott, Melrose, \$10.00.

Third—Earle Blake, Peabody, \$10.

Fourth—George Bulgaris, Newbury, \$5.00.

Fifth—Dorrall Berry, North Andover, \$5.00.

The Mrs. R. S. Bauer Awards for Excellence in Homemaking Projects:

First—Margaret Gordon, Methuen, \$20.00.

Second—Margaret Burton, Saugus, \$10.00.

Third—Alice Dalton, Lawrence, \$10.

Fourth—Helen Budd, Methuen, \$5.

Fifth—Stella Wozniac, Salem, \$5.

The Governor John Endecott Awards for Superior Projects in Horticulture:

First—Woodberry Bartlett, Beverly, \$20.00.

Second—Everett Silva, Rockport, \$10.00.

Third—Bradford Webb, Andover, \$5.00.

Fourth—Theron Johnson, Middleton, \$5.00.

Fifth—Robert Griffin, Saugus, \$5.00.

Sixth—Herbert Henderson, Andover, \$5.00.

Alumni Association Awards for Greatest Improvement in Academic Work:

Homemaking—Miriam Pohju, Peabody, \$5.00.

Agricultural—Herbert Henderson, Andover, \$5.00.

Abraham Krasker Medals for Excellence in English:

Homemaking—Flora Maloney, Beverly.

Agricultural—Alexander Swiniarski, Peabody.

Following are the committees who judged the various prize-winners:

The R. S. Bauer Awards—Mr. M. G. Grey and Mr. R. H. Sawyer, trustees of the School; Mr. J. N. Dummer, member of the advisory board.

The John Endecott Awards—Mr. Conrad Tronerved, Mr. H. A. Harrington, and Mr. A. L. Pierce, members of the advisory board of the school.

The Mrs. R. S. Bauer Awards—Mrs. R. S. Bauer, Mrs. R. L. Hodgdon, Mrs. J. A. Pitman, and Mrs. F. M. Smith.

Essex Aggie Fruit-Judging Team State Champions



Left to Right, JACK ELLIS, BRADFORD WEBB, INSTRUCTOR C. M. WOOD, SIDNEY BATCHELDER

The Essex Aggie fruit-judging team well deserves the honor which is theirs in making the silver cup their own permanent trophy with three winnings. The boys on the teams are greatly indebted to Instructor C. M. Wood for his help and enthusiasm in the contests which mean so much to the students. All of the Essex Aggie teams and contests have been under the personal direction of Mr. Wood.

During the summer project season of 1926, fruit-judging was started with students having projects at the Essex County Agricultural School. Since that year, teams representing the school have participated in practically all the student fruit-judging contests. There are four annual contests in which students may participate:

(1) Interscholastic Fruit-Judging Contest at Amherst.

(2) Mid-winter Fruit-Judging Contest at Worcester.

(3) Brockton Fair Contest.

(4) Topsfield Fair Contest.

A cup is awarded annually at Amherst, and that school winning it for three years is permanent holder of the trophy. The Littleton High School students were the first to win the cup, but in 1927 the Essex County

Agricultural School made its first temporary claim, with Horace Shute, '27, of Newbury, Peter Pasukonis, '28, of Rowley, and Thomas Gould, '28, of Lynn, making up the team. In 1928 the Aggies took second place, losing to Norfolk County Agricultural School, and in 1929 third place, with Worcester North High School the cup winners. However, in 1929, Arthur Gordon of Rowley had a perfect individual score and won a silver cup for being highest scorer. Gordon is now running his own fruit and vegetable farm in Rowley. In the Spring of 1930, with Orin Woodman, '30, of Beverly, Sidney Batchelder, '32, of Andover, and Carlton Symmes, '32, of Saugus, comprising the team, Essex County Agricultural School took the cup again. In November, 1930, the new Fall date of the contest, Bradford Webb, '31, Sidney Batchelder, '32, both of Andover, and Jack Ellis, '31, of Peabody, won first place among fifteen competing teams, making the large silver trophy permanent property for this School. Bradford Webb was second high individual, thereby winning a silver medal, and Sidney Batchelder captured the bronze medal representing third high individual.

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CALENDAR

December 19—Christmas recess begins.
December 20—Graduation Exercises, Fourth Evening Poultry Class.
December 30-January 3—Boston Poultry Show.
January 7-9 — Union Agricultural Meeting at Worcester.
March—Farmers' and Homemakers' Day.

Christmas Greetings

Christmas seems to be one of those holidays unlike other holidays. It's something like Sunday, but people forget to worship in the customary way. But they *do* worship—indeed they do. Everyone is happy—and glad to be alive and grateful for the candy canes and Christmas trees. Christmas is not only a holiday—it's a season—an important season—more outstanding than just Fall or Autumn. It's a season of soft lights and Christmas wreaths, of gentle music and tender stories. Once again we welcome Christmas—remembering that it is Christ's birthday.

Ye Olde Aggie Food Shoppe

The girls in the Homemaking Department are taking orders, upon request, for home-made foods, including cakes, cup-cakes, doughnuts, branberry tarts, and cookies (sugar, ginger, brownies, and hermits).

They are also offering a waitress service (with uniform) at twenty-five cents per hour plus carfare.

Requests for waitress service or orders for food must be placed between the hours of 8.30-9.30 A. M. and 11.30-12.00 noon of the previous day. For information please call Danvers 430.

Honor Roll

Instructor Mostrom, educational manager, has announced the first term Honor Roll, as follows:

Those coming under the credit-group 20-21—Robert Waters, Beverly; Carl Swanson, Rockport; Malcolm Spalding, Newburyport; Dora Winchester, Saugus; John Lynch, Andover.

Those coming under the credit-group 19-20—Henry Cryan, Swampscott; Harry Green, Rockport; Stephen Hanson, Rowley; Francis Biery, Methuen; William Costley, Lynn; Milton Snow, Lawrence; Elmer Flinders, Rockport; Mortimer Brown, Marblehead; Gilbert Weed, Lynn.

Those coming under the credit-group 18-19—Woodbury Bartlett, Beverly; Charles Cook, Saugus; Otis Curtis, Gloucester; Hector Gilman, Salisbury; Nathaniel Hart, Lawrence; Malcolm Skinner, Lawrence; Carlton Brown, Rockport; George Perkins, Rockport; Kenneth Sprague, North Andover; Alfred Thompson, Amesbury; Sidney Batchelder, Andover; Walter Lewis, Andover; Woodrow Follett, Lawrence; Arthur Cobb, Newburyport; James Neville, Saugus; Arthur Peatman, Andover; Robert Spidell, Methuen; Donald Ryan, Swampscott; Jack Schafer, Marblehead; Albert Daggart, Lawrence; Robert Bartlett, Andover; Nathan Clark, Swampscott; Edwin Sherrill, Newburyport; Hyman Weinstein, Salem; Fred Anderson, Beverly; Robert Davis, Salem; Henry McLaughlin, Peabody; Michael Pickowicz, Billerica; George Souyda, Saugus; Austin Basso, Andover; Chester Ellis, Lynn; Eric Peterson, Newbury; Ralph Broughton, Peabody, and Thomas Swiniarski, Peabody.

School Notes

A gasoline and oil station is to be operated by the Young Farmers' Association. Members will receive this gas and oil at a reduced rate. It is expected that the pump will be installed by January first.

Ice cream is now on sale every noontime at the School for the benefit of the Young Farmers' Association.

The first vegetable seed catalogue of the season has been received from Stokes of Philadelphia, including a simplified variety of carefully bred seeds holding that motto, "Quality not Quantity."

Dr. Charles Townsend, naturalist and eminent authority on bird life and nature, was the special speaker for Science Day. His talk on the glories of Ipswich sand dunes with their animal tracks and beauties of nature was especially appealing to the students and members of the faculty and staff.

Girls' Basket Ball Schedule

The girls' basket ball season promises to be a successful one, with Eva Belcher as manager. The team line-up has not yet been determined, but the schedule is as follows:

Jan. 8, Rockport; Jan. 15, at Rockport; Jan. 20, at Manchester; Jan. 22, at Beverly; Jan. 29, Peabody; Feb. 3, at Andover; Feb. 5, Beverly; Feb. 10, at Peabody; Feb. 17, Andover; Feb. 19, at Manchester.

Boys' Basket Ball Schedule

The boys are looking forward to a rousing season, competing with the following teams:

Jan. 7, Alumni; Jan. 9, at St. Joseph's High School; Jan. 13, Peabody; Jan. 16, open; Jan. 21, at Haverhill; Jan. 23, at Sanborn; Jan. 28, at Gloucester; Jan. 30, at Norfolk; Feb. 4, at Beverly; Feb. 6, at Peabody; Feb. 11, open; Feb. 15, Bristol; Feb. 13, Sanborn; Feb. 20, Norfolk; Feb. 23, at Salem; Feb. 23, open; Feb. 27, at Bristol; March 4, at Dummer.

Football Factors

With P. H. Conhig's strict and determined coaching, the Aggies had a victorious 4 to 3 season, with an average of 76 to their opponents' 66.

Irving Day was the team's efficient manager, ably assisted by Albert Gordon.

A schedule of the games is as follows:

	Ag-Oppo-
	gies nents
Oct. 9—St. Joseph's Juniorate	27 0
Oct. 13—Methuen	13 7
Oct. 18—Marblehead	7 38
Nov. 8—Swampscott	19 0
Nov. 11—Peabody	2 0
Nov. 15—Gloucester	7 13
Nov. 22—Dummer Academy	0 7

Freshman Inter-class Football Series

This year's Freshman Class planned a series of games between class sections. These games were played during class time upon the completion of regular work.

The playing was fast, hard, and clean. The outstanding picture presented by these games was that of team loyalty.

Following are the scores.

1A.....6	1C.....12
1A.....0	1B.....6
1B.....0	1C.....0

On October 22, a track meet was held here with Norfolk County Agricultural School. Essex Aggie was defeated by a score of 30-29.

Report of Rodent Control Campaign

Members of the Rodent Control Campaign, a self-supporting project, report that 85 per cent of those people by whom cards were returned, had satisfactory results with the rat bait distributed. Approximately 19 per cent of the people receiving baits turned in their reports. Those securing unsatisfactory results have been mailed Farmer's Bulletin No. 1533, on rat control, and special letters explaining where their mistakes have been made. Anyone desirous of this Farmer's Bulletin, please address County Agent F. C. Smith, Hathorne.

The total cost of the campaign was \$264.53 and the total balance \$150.97. This surplus is divided equally between the Essex County Extension Service and the Rodent Control Fund. Thus \$75.49 has been retained in the county and \$75.48 paid to the Rodent Control Fund.

YOUNG FARMERS ASSIST

The Young Farmers' Association co-operated with the Essex County Extension Service and the United States Department of Agriculture in conducting this campaign. They mixed the bait and delivered it in sacks and packages to forty-two distributing agents round about the county.

Following is a list of the Young Farmers who helped:

Dora Winchester, Saugus; Walter Lewis, Andover; Gordon Cool, Manchester; Robert Bartlett, Beverly; Walter Lecraw, Marblehead; George Lambert, West Toxford; James Hollins, Methuen; Harold Bowen, Ipswich; Arthur Bulgariis, Byfield; Bradford Silsby, Haverhill; Arthur Cobb, Newburyport; Roland Gray, Salem; Richard Heider, North Andover; Bernard Carlton, Haverhill; Earl Dunn, Peabody; Malcolm Skinner, Lawrence; Frank Bond, Saugus; David Fischer, Saugus; Ralph Noyes, West Newbury; William Tinsch, Lawrence; Hector Gilman, Salisbury; Gilbert Weed, Lynn; Joseph Dole, Andover; John Mackenzie, Wakefield; John Lynch, Andover.

Note to Corn Growers

Deliberate violators of the corn-borer control regulations are to be summoned to court. Under these regulations it is understood that all corn stubble in the quarantined area shall be plowed under by December 1 each year.

Every year there are a few gardeners who are raising corn for the first time and are unaware of the regulations. Informal hearings are arranged by the Department of Agriculture to inform these people of the need of strict adherence to the regulations without subjecting them to penalties.

All of Massachusetts, east of Warren, is under quarantine for the two-brooded form of the corn-borer. Control measures for this type of borer are plowing under in the fall. The single-brooded corn-borer which exists in western Massachusetts can be controlled by either fall or spring plowing.

Mosquitoes Aid Unemployed

More than one hundred men are now employed in digging hundreds of miles of ditches on Cape Cod to prevent stagnant pools in which mosquitoes, coming out of winter seclusion next spring, might lay their eggs. It takes water to hatch mosquito eggs, and thousands of stagnant pools which have been previously left by high tides on Cape Cod will run out through the ditches and leave the eggs to dry out and come to naught.

The ditching is part of a \$200,000 Cape Cod campaign to free itself of mosquitoes. A sum of \$200,000 has already been subscribed privately to pay for the work. In addition, town appropriations totalling over \$25,000 have been made.

Robert L. Armstrong, trained entomologist, is studying the areas and indicates to the superintendents all locations needing drainage. The initial cost of this drainage is considerable, but as planned by engineers of the Reclamation Board there will be a moderate cost only for upkeep, once the drainage is completed. After each high tide the ditches will be patrolled to make sure that the water has not floated sods into the ditch and thus obstructed the natural flow of the water. Upon completion of the salt marsh area a definite drive will be made on mosquitoes breeding in fresh water.

It is expected that the drainage job will last all winter, thus giving continuous employment to numerous men. The payroll is approximately \$2,500 a week.

Science Day Winners

The sixth annual Science Day, originated by Mr. Franklin E. Heald, Supervisor of Agricultural Education in Massachusetts, was observed Wednesday, December 3, in the School assembly hall. Awards for exhibitors were presented by Instructor Metcalf to the following students:

First Prizes—Harry Green, Rockport; Richard Bailey, Haverhill; Frank Bond, Saugus.

Second Prizes—William Hay, Methuen; Thomas Swiniarski, Peabody.

Third Prizes—Carlton Symmes, Saugus; Alfred Caproni.

The Sweepstake Medals were awarded to Sidney Batchelder, William Hay, and Carlton Symmes.

Congratulations, Class 1920

At an alumni business meeting held directly after the Commencement exercises on November twenty-fifth, the following officers for the coming year were elected: President, Mr. Alexander MacDonald; vice-presidents, Miss Helen Lewis (re-elected), Mr. Llewellyn Jones (re-elected); secretary-treasurer, Mr. Horace J. Shute (re-elected).

This year the Class of 1920 held its ten-year reunion and enjoyed a real Thanksgiving banquet. The association was exceedingly fortunate in securing for its speaker of the evening, Mr. Leverett Saltonstall, Speaker from the House of Representatives.

The Class of 1920 has proved an interesting one. Frequently meetings have been held at the class members' homes, and with seventy per cent of the class back at reunion, the spirit of 1920 was exemplified as enthusiastic and loyal.

Robert Nelson, former president of the Alumni Association, has been a conscientious worker. Along with his duties of head gardener at the Colonel Prentiss estate in Gloucester, he has found time to keep in touch with and hold together the Alumni Association.

Alexander MacDonald, incoming president, is deserving of the honor bestowed upon him. MacDonald has been doing splendid work for the past few years as caretaker of the greenhouses and head gardener on the Perkins estate in Salem.

Nuptials

Alice G. DeCrancy ('28)

to

Mr. Herbert T. Wills

November 2, 1930

Present address:

7 Acorn Street,
Lynn, Massachusetts.

Katherine Capilla

to

Mr. Joseph Parisi ('26)

October 12, 1930

Present address:

22 Plum Street,
East Gloucester,
Massachusetts.

Irene Balzotti

to

Mr. Joseph A. Finocchio ('28)

July 27, 1930

Present address:

8 Hillcrest Avenue,
Beverly, Massachusetts.

Eleanor Edgerly

to

Mr. Robert L. Mooers ('28)

October 11, 1930

Present address:

673 Primrose Street,
Haverhill, Massachusetts.

Reducing the Food Bill

1. Plan meals carefully and have few left-overs.
2. Plan to use left-overs in appetizing dishes.
3. Do not serve too much variety in one meal, but have variety from day to day.
4. Plan to use all the foods supplied at home, as milk, chickens, eggs, fruits, and vegetables.
5. Buy in quantities if there are storage facilities. Care should be taken to buy only what will be actually needed, so there will be no waste. If the family is large enough, canned goods may be advantageously purchased by the case.
6. Use vegetables and fruits in season.
7. Use eggs abundantly when they are cheap, and less often when they are expensive.
8. Use the inexpensive cuts of meat, such as neck and flank.
9. When using bacon, try to use the fat. It is well to use it in a dish where the fat may be used for flavoring.
10. Have the children save the money generally spent for candy and buy fruit with it.
11. Use more desserts made from milk, eggs, cereals, and dried fruits.
12. Give small servings and see that the food is eaten and not left on the plate.

Teach Children Care of Clothing

Boys and girls become more orderly and better groomed people if they assume the responsibility of taking care of their own clothing. When the child begins to walk, he may be taught to hang up his night clothes in the morning and his day clothes when he undresses at night, if hooks are within his reach. As he grows older more responsibility may be added if equipment is conveniently arranged.

Arrange hooks low enough and have child hang up his own clothes every night shortly after he learns to walk.

Provide a regular hook for night-gown or sleeper. A homemade clothes tree may be made which grows by raising the hooks.

For older children arrange to have a rod in the closet adjusted in height with clothes hangers for dresses and suits.

Provide each child with a simple laundry bag for his own soiled clothing.

Provide each child with a bureau drawer or a box for his own clean clothing.

Provide a regular place with hooks in a convenient place within child's reach for the child's coat, sweater, hat, and cap.

Better Kitchens Project

On Friday, December 12, there were twelve community leaders represented at the Better Kitchens project led by Mrs. Haines, state leader in Extension Service. The meeting was held in Newburyport, at the Y. W. C. A. building. Women from as far as Amesbury, Merrimac, and Haverhill attended, as did others from nearby sections. It was inspiring to see such interest on the part of these leaders. At the opening of the meeting each leader gave a report on her previous community meeting. Many stated improvement and increasing interest among their groups. Surely the meetings are proving helpful and pleasurable to many homemakers.

Mrs. Haines answered questions concerning the kitchen which have occurred to members and group leaders. Upon completion of a report on kitchen scores, Mrs. Haines gave a finished and informative talk on the kitchen floor and its care. First she discussed the old floor, its treatment and finishes; next she took up new floors, the preparations and finishes for new floors; then floor coverings were dealt with; the kinds, their laying and finishes; and finally, a discussion of the care of the kitchen floor was made.

As an added thought, Mrs. Haines touched upon the subject of heights for working surfaces in the kitchen.

The meeting was pleasantly interesting. Mrs. Haines spoke with authority and illustrated as many of her points as possible. Each group leader was supplied with samples of wood and various stains, floor coverings and pamphlets, which will be helpful at later demonstrations in their own communities.

The meeting started at 10:30, and, with an hour out for lunch, lasted until 3:15. The next will be held January 9.

Children's Clothes—School Lunch Box

Our two major projects beginning in January, will concern young children. The home demonstration agent is now planning for these projects, which will be conducted under project leaders. Miss May Foley will lead the first meeting in the lunch box project, January 28, in Ipswich. The second will be held February 18. Leaders from surrounding communities will attend and give back the information received. Those desiring to belong to community groups please get in touch with the town chairman or with Miss Marion P. Crawford, Haverhill, Mass.

Annual Extension Banquet

Commissioner Arthur W. Gilbert, our main speaker, addressed the extension workers of Essex County at the annual extension banquet held at the Essex County Agricultural School, November 18. The meeting was composed of sixty town chairmen, committee men and local leaders, four representatives from the state office, and the extension force of Essex County, consisting of Miss Marion Crawford, Home Demonstration Agent, Mrs. Mary M. MacIntire, Assistant Home Demonstration Agent, Horace J. Shute, County Club Agent, and Francis C. Smith, County Agricultural Agent.

A social period opened the meeting, which was followed by the banquet. Fred A. Smith, Director of the Extension Service in Essex County, delivered a word of greeting.

Following the banquet feast, State leaders were introduced by the toastmaster, Mr. Silas Little, chairman of the Essex County Local Leaders Association. As each leader was introduced he was greeted with a "How do you do" song. Each state leader gave a report on what the County workers have accomplished during the past year. Dr. Gilbert talked interestingly on the co-operation which the Department of Agriculture is giving toward the safety of the New England farmers' product, both in the market and the farm.

The meeting was brought to a close with a most impressive candle-light service, conducted by Mr. Farley. As he told the story of the origin of the candle-light service he lit a candle given him at the Maryland State 4-H Camp, thus carrying the spirit of service back to Essex County. With this candle Mr. Farley lighted the four county workers' candles, who in turn lighted those of the entire group and joined in singing "Follow the Gleam," thus typifying the spirit in which the extension services are passed along.

Round About the County in December

Following is a list of the December Projects about the county:

Better Kitchens—Newbury, Salisbury, Rocks Village, Merrimac, Andover Center, Shawshen, West Andover, Ballardvale, Lynnfield.

Child Development—Saugus Center, Cliftondale, Lynnfield, Lawrence, West Andover, Danvers, Marblehead, Beverly, Gloucester.

Clothing—Marblehead, Georgetown, Salisbury.

Home Furnishing—Rockport.

Furniture Renovation—West Boxford.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 12

HATHORNE, MASS., JANUARY, 1931

NO. 1

Completion of the New Cow Barn

With the completion of the School's new cow barn, a long-desired improvement has been realized. Having a capacity for sixteen milking cows, six yearlings and ten young calves, it now shelters six old stock and six new in Jamesway improved cow stalls and calf pens. The barn, a low, buff-colored building (36' by 56'), with roof of slate green, sets into the bank on the south end. The foundation is concrete and a four-foot cement block wall topped by a framed wall of five feet in protection in back of the cows.

The interior of the barn is entirely floored in concrete with a raised feed alley, and a cork brick platform on which the cows may stand. The walls four feet up are plastered and painted dark gray, surmounted by a white enamel upper wall and ceiling. This white enamel, a product of the Tropical Paint Company, is considered the latest improvement in dairy plants. Equipment for the barn was chosen with the thought of reducing human labor. Improvement of sanitary conditions over those of the old barn have been accomplished with running water throughout, and better lighting and ventilation. The end of the barn toward the street faces south by southwest.

The new barn ties in with the old, which will be used for hay and grain storage. A new Ross all metal silo, matching the roof in color, is located at the right of the feed alley with a bull pen and two maternity pens at the left, partitioned off from the floor of the old barn. The herd sire, a pure-bred Holstein-Friesian, loaned to the school by Theodore S. Gold of Cornwall, Connecticut, will be sheltered in the new pen. This bull is four years of age and descended from a line of ancestry much better than the average Holstein. Through this animal the Dairy Division expects to increase the production of their new herd. Besides Holsteins, the school is breeding Guernseys and Jerseys.

All the work done on this barn was under the direct supervision of Instructor Fred R. Hardy. Groups of students assisting with the construction received practical training in farm mechanics.



THE NEW COW BARN

Library Developments

The school library has been completely transformed, and greatly improved. All book cases, which previously filled the entire room in rows stretching from one end to the other, now line the four walls, in shelves of six groups. Two long tables accommodating sixteen students are to be used for study purposes in the library.

Instructor R. E. Knowlton built the shelves and tables, and members of the Library Committee refinished them. A clean, light atmosphere now prevails, prompting clear and precise study.

Small posters, urging the students to develop their reading tastes and to respect the bindings as well as the contents of books, have been printed and advantageously arranged around the library.

Library Material to be Exhibited

On Thursday, January 29, books and magazines recently acquired will be displayed in the main hall where a joint assembly will be held. Miss Mary Byer Smith of the Library Division of the State Department of Education will speak, focusing attention on the school books and magazines. Posters from the Peabody Institute Library of Danvers will be displayed with those belonging to the School.

Not only does the barn add to the appearance of the school's property but it is an example of the modern type of building, constructed with the application of beauty to utility.

Order Those Chix Now

Undoubtedly many of us have been postponing the placing of orders for baby chix this winter in view of the unsettled industrial and agricultural situation. A number of people have made definite plans, however, and have contracted for delivery of chix or eggs on desirable dates. Indecision at this time may mean disappointment later on, so decide now and place your order. The indications are that unemployment will be less in 1931 than in 1930, and increased earnings will mean greater buying capacity next fall.

We do not recommend much expansion for 1931 unless your market this past season warrants it, but neither do we advise the individual who has been following a conservative and regular program to curtail.

Quality will count more than ever this year, and if there has been a tendency on your part to crowd the brooder house a trifle, or to overcrowd your range, put 250 chix under your 1000-chick stove instead of 300. It will mean better broilers this summer, and finer pullets to put in the laying house this fall.

—J. S. Bennett.

Information on the way in which woods help pay the farm bills is contained in Leaflet No. 29, Farm Woods, a Savings Bank Paying Interest, and Miscellaneous Publication No. 87, Profits from Farm Woods, which may be obtained from the United States Department of Agriculture, Washington, D. C.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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CALENDAR

February 20-March 1—Vacation for Homemaking Department.

March 11—Farmers' and Homemakers' Day.

Farmer's and Homemakers' Day March 11

The annual Farmers' and Homemakers' Day of the Essex County Agricultural School will be held March 11, 1931. Speakers are being secured and the general aim will be to emphasize the topic, "Marketing." This subject today is uppermost in the minds of farmers. Watch the next issue for further details.

Prosperity

Incidentally it can't exist if you don't make it exist. And you can't make it exist unless you want it to exist. Don't think you want it if you're not willing to make the effort to obtain it, because what you really want is leisure—and easy living.

What if it were doomed—to merely fill in between depressions—to be a side issue—what if it were fated to be something people talk about and hope for, but never realize!

But—what if prosperity were bound to be inevitable because of faith and ambitious action—what if it were the steering wheel—not merely the clutch! That's what it must be—and will be, the moment we look ahead and watch sharply around corners.

During January, forty women gave time to their communities serving as project leaders. Surely they have received help themselves and given much to others. Writes Theodore Roosevelt: "What a man does for himself dies with him, but what he does for his community lives long after he is gone."

Homemaking Notes

The High School Specials of the Homemaking Department have been divided into three groups. For three consecutive Fridays, beginning January 16, each group will serve luncheons to the faculty and staff, in tea-room style, offering menus which they themselves have selected as well as prepared. The girls will do all the kitchen and tea-room service with the assistance of their instructor, Miss Ruth Emerson. Service of this kind is extremely practical for the girls whose summer projects include managing or working in tea rooms and hotels.

For further experience, the girls often act as waitresses for the trustees, or guest speakers who are entertained for lunch at the school.

Many satisfactory reports have been sent in to the Homemaking Department from people patronizing the Aggie Food Shoppe. The girls realize their responsibility in fulfilling orders and are doing their utmost to have them satisfactory. Don't forget that the hours for ordering are between 8:30-9:30 A. M. and 11:30-12:00 noon of the previous day. Waitress service at twenty-five cents per hour plus cartage is also available.

NOTE: During vacation periods no orders are taken, but waitresses may be secured by calling Danvers 230 and asking for Miss Wright. The next vacation extends from February 20 through March 1.

Young Florists Visit Wholesale and Retail Markets

On Tuesday, Dec. 16, the advanced students in floriculture at the Essex Agricultural School, accompanied by their instructor, H. Linwood White, made their annual trip to the Boston wholesale flower market, and to a number of retail florists' establishments. Manager Keane explained the operations of the Boston Flower Exchange Inc., while the salesmen and growers present gave the young florists further insight into the wholesale distribution. The class was granted full freedom in the Henry M. Robinson Co. store, where they found an unending array of supplies. Gordon Fisher of the Arnold-Fisher Co. talked advisedly on merchandising, illustrating with numerous examples, as he led the party through his five-story building. Among the retail stores visited were John J. O'Brien's, Galvin's, Houghton-Gorney's and Henry Penn's. The students were especially impressed by the successive mark-up in prices due to commissions, and the increasingly heavy overhead as they approached Boston's retail floral center.

In Memoriam

The news of the death of Mrs. Grace (Hartman) Osborne at the Beverly Hospital on the morning of January 8, came as a shock to her family and friends. The reports of the previous day had been so encouraging that the family had felt hopeful that she would conquer in her long and brave struggle. She leaves to mourn her loss, her husband, J. Roy Osborne, and five small children as well as her parents, Mr. and Mrs. Charles Hartman of Danvers. She, as well as her husband, was a member of the class of 1920 at the Essex County Agricultural School, and an active member of the alumni association where her help and interest will be sadly missed. The funeral services were held Sunday afternoon, January 11, at 2:30 o'clock in the Middleton Congregational church. The services were conducted by Rev. Ralph Webb, pastor of the church, who was assisted by Rev. C. C. Perkins of the Seventh Day Adventist Church of Lynn. During the services two solos were rendered by Mr. Raymond Eaton of Danvers. Burial was in the family lot in Oakdale Cemetery.

—Helen M. Lewis, 1920.

To the Memory of Mrs. Clara N. Dummer

With sadness we chronicle the death of Mrs. Joseph N. Dummer, who died in her home at Glen Mills, Rowley, on Wednesday, December 31.

Mrs. Dummer was an active member of our Women's Advisory Board. She will be keenly missed by a wide circle of friends, both in our organization as well as in Grange and civic life.

Mr. J. F. Symmes, father of Carlton Symmes '32, of Saugus, made and donated to the School a beautiful wooden standard for a silver trophy recently won by the fruit-judging team.

In the spring of 1930 Carlton was one of three members of the team which took the cup for Essex Aggies, making a second winning for this School. As has been printed in a previous number, the team made its permanent claim on the trophy in the fall of 1930.

Of Interest to Grangers

The publication of a brochure entitled "Tercentenary of New England Agriculture, 1630-1930," may be of interest to grangers and directors or instructors of vocational schools in Massachusetts. It is valuable for study or general agricultural information.

A nominal sum of 25c a copy covers the bare cost of publication. Orders may be addressed to Dr. Arthur W. Gilbert, Commissioner of Agriculture, 136 State House, Boston.

Final Report of Rodent Control Campaign

In addition to what was printed in last month's issue concerning the rodent control campaign, a few statements of interest from recent reports still remain.

Twenty-five per cent of the cards sent out were returned with their reports showing an average of three dead rats per farm. With only one quarter of the results recorded, it is plain that not nearly all of the successful reports are known. Eighty per cent of those who replied were satisfied with their results.

Of the three baits used, hamburger was the most popular, fish next, and cereal least.

A test was made using frozen fish prepared by the Birdseye freezing method. When the fish was thawed out and used, it gave practically the same results that canned fish did. The actual percentage showed a slight preference for the frozen fish.

On the basis of returns from circulars sent out, Essex County ranked second in the number of orders received.

State-wide Campaign

Plans are approved for a state-wide campaign to start in October, 1931. Baits will be mixed and delivered to the various counties for distribution.

Body Weight Important

The following table, given by Professor Rice in his talk at Halifax, is of interest in showing the relation of body weight to egg production and egg size. These figures are from a total of 633 Rhode Island Reds and cover a period of four years.

Weight	Number of Eggs	Weight per Doz.
Under 4½ lbs.	137.7	23.3 oz.
4½-5 lbs.	162.1	23.8 oz.
5-5½ lbs.	166.1	24.2 oz.
5½-6 lbs.	172.8	24.4 oz.
6-6½ lbs.	166.8	24.8 oz.
6½-7 lbs.	170.8	25.4 oz.
7-7½ lbs.	166.5	24.9 oz.
7½-8 lbs.	158.8	25.1 oz.
8-8½ lbs.	111.0	26.3 oz.

Proven Sire Campaign

The Massachusetts College of Agriculture is cooperating with the Essex County Extension Service in starting a Proven Sire Campaign. A survey of Essex County dairies, particularly those using pure-bred herds, will be made, and the necessary records and pedigrees will be secured for ground work in proving the sires of this county. Plans are under way for a meeting to be held at the Essex County Agricultural School in the near future. Anyone interested may get in touch with F. C. Smith, County Agent, Hathorne, Massachusetts.

Alfalfa Products

The Feed Control officials of the Massachusetts Agricultural Experiment Station have recently found a new feed product on the market. It is alfalfa stem meal, a woody meal high in fibre (38%). The control officials recognize three grades of alfalfa meal: first, that made by grinding the entire alfalfa hay containing not over 33% fibre; second, the leaf meal, mostly alfalfa leaves, containing not over 18% fibre; and third, stem meal, a by-product from the manufacture of alfalfa leaf meal; it may contain as high as 40% fibre. Purchasers should insist on having the guarantee tag on every bag. If interested in proving a guarantee, send a sample for testing, to the Official Chemist, Feed Control, Massachusetts Agricultural Experiment Station, Amherst, Massachusetts.

New Cow Tester Appointed

Lester Knowlton of Danvers, a graduate of the class of 1930 of the Essex County Agricultural School, assumed his duties on January 1, 1931, as tester for the Essex County Dairy Herd Improvement Association. He succeeds J. N. Leekie, who has accepted an excellent position in Washington, D. C.

While at the Aggie School Mr. Knowlton's scholarship and project work were both above the average. His ability and thoroughness should win him great success.

Alumni Notes

Members of the class of 1920 have been requested by the Secretary and Treasurer, Alexander MacDonald, to contribute toward a class floral fund.

The Essex Aggie Alumni Association is planning to interview every graduate for the purpose of interesting more of the alumni in the organization and to obtain suggestions for the future work of the association.

Weather Summary for 1930

Maximum temperature	96°, Aug. 3
Minimum temperature	Feb. 17
Mean daily temperature	48.6°
5-year average mean daily temp.	47.5°
Mean daily temperature 1929	46.0°
Total precipitation 1930	32.58"
Total precipitation 1929	38.60"
5-year average	38.99"
Boston normal precipitation	40.14"
Snowfall 1930	23"
Snowfall 1929	27"
4-year average '26-'29	42.7"
Rain fell on (1929)	132 days
Rain fell on (1930)	109 days
Clear days (1930) 160 (1929) 156	
Partly cloudy days (1930) 101 (1929) 114	
Cloudy days (1930) 104; (1929) 95	
Total hours sunshine (1930)	2497.5
Total hours sunshine (1929)	2537
Per cent sunshine (1930)	56.62
Per cent sunshine (1929)	56.7
Last frost, June 1st	
First heavy frosts, October 21 to 23	

The year 1930 was the driest in six years and yet the rainfall was well distributed throughout most of the growing season. The snow fall was the lightest for the same period. The period between first and last frosts was 142 days, somewhat longer than the year before.

ization and to obtain suggestions for the future work of the association.

Alfred Bryer, class of '22, has just accepted a new position in Norwich Town, Connecticut, as head dairyman on a large farm of one hundred acres.

Henry Ellis, class of '27, took for his senior project the position of ice cream maker at the Pittsfield Milk Exchange, Pittsfield, Massachusetts. Since that time he has taken a year's course in Dairy Industry at Cornell, and was production foreman and ice cream maker for the Dairyman's League Cooperative Association in Utica, N. Y., for a year and a half. At present he is a student at the Bryant and Stratton College of Business Administration. His address is 98 Providence St., Providence, Rhode Island.

A son was born to Mrs. John McGrath, (Sylvia Sharples, '29), on December 17, 1930.

Weather Summary - September to December, 1930

	Sept.	Oct.	Nov.	Dec.
Maximum temperature	89	89	69	45
Minimum temperature	38	26	7	2
Mean daily temperature	65.9	50.1	41.3	28.7
5-year average (25-'29)	60.3	50.3	41.7	29.5
Greatest daily range	39	40	35	2
Least daily range	3	3	3	1
Precipitation	71"	4.09"	3.87"	1.88"
5-year average (25-'29)	2.77"	3.64"	3.19"	4.24"
Total for year	...	...	...	...
5-year average	...	...	...	...
Deficiency	...	...	...	...
Average relative humidity, 8 A. M.	80.6%	75.3%	79.0%	81.26%
Number days rain fell	8	12	9	11
Number clear days	18	11	14	22
Partly cloudy days	9	5	8	4
Cloudy days	3	12	8	16
Total hours sunshine	259.5	187	162	117
Per cent sunshine	49.2	33.9	55.0	41.3
Snowfall	...	...	1½"	10"
First heavy frosts	...	21st-'23rd	...	...

September recorded the smallest rainfall for any month in over six years. It was decidedly above normal in temperature and in hours of sunshine. December was the driest in five years. October and November were normal months in most prospects.

Let One of Your Fruits Each Day Be Apples

Apples are plentiful and cheap this year, so should be used often. There probably is no fruit of which the majority of people tire less quickly. They may be used in a variety of ways for breakfast, dinner and supper. The crispness, tart flavor, and color make them attractive to eat raw. Apples contain vitamins, minerals, and roughage which are important for growth and health. As a change from some of the common methods of preparing apples, try these:

Applesauce Delight

Put a thin layer of sweetened applesauce (not over 1½ inches) into a buttered casserole. Butter stale bread, and sprinkle generously with sugar and cinnamon (1 teaspoon cinnamon to ½ cup sugar). Cut bread into small squares and cover applesauce with it. Put into moderate oven until sugar is well melted and applesauce is hot through. Serve with top milk, being careful to keep toasted bread on top.

Apple and Cranberry Relish

1 cup ground raw cranberries
1 cup sugar
1 cup ground raw apple (unpared)
Mix all together and let stand one hour before serving.

Apple and Bacon Sandwiches

Cover a slice of toasted bread with a thick layer of heavy applesauce. Place 2 slices of bacon on top of the sauce, and put in a hot oven until the bacon is crisp. Serve at once.

Modification: In place of plain toast, use a cheese sandwich, either toasted or made like a cheese dream. Spread on the hot applesauce and serve at once.

Applesauce Cake

½ cup fat
1 cup brown sugar
1 teaspoon vanilla
1 teaspoon cinnamon
½ teaspoon cloves
½ teaspoon nutmeg
½ teaspoon salt
3 tablespoons molasses
1 cup mashed, unsweetened applesauce
1 egg
2 cups flour
1 teaspoon soda

Cream the fat and sugar and mix until very creamy. Add the rest of the ingredients and beat for 2 minutes. Pour into a loaf pan, which has been fitted with waxed paper. Bake in a slow oven for 40 minutes. This is excellent cake for the children's lunch boxes.

—May E. Foley.

Aggie Highlights of Worcester Convention

On Wednesday, January 14, the School was represented in various fields at the annual Union Agricultural Convention in Worcester.

Ralph Noyes, of West Newbury, and John MacKenzie, of Wakefield, students in poultry, staged a demonstration on marketing eggs according to Massachusetts standard grades. Woodbury Bartlett, of Beverly, explained and exhibited the methods of preparing dish gardens, and Sidney Batchelder, of Andover, gave an illustrated talk on the apple maggot (railroad worm).

On Friday, January 16, the Essex Chapter of the Massachusetts Young Farmers Association sent four students to participate in the fruit-judging contest. Sidney Batchelder and Bradford Webb, both of Andover, took second and third ribbons respectively, with individual tie scores of 1760 out of a possible 1800. (Kenneth Howes of Sanderson Academy had a perfect individual score and was awarded the blue ribbon). Jack Ellis, of Peabody, and Carlton Symmes, of Saugus, were the other young farmers who judged fruit.

A scholarship of \$60 has been offered by the Massachusetts Fruit Growers' Association and is to be awarded later. Determination of this award rests with Junior Extension Service.

Interesting Facts About Bees

In nature the plant and animal kingdom are very closely related. Were it not for the flowers, bees would perish. Were it not for the insects, plants would not be enabled to produce seed. For every dollar's worth of honey and beeswax obtained from a colony of bees the colony performs at least twenty dollars' worth of value in pollinization of commercial plants (cucumbers, squash, grapes, apples, etc.). It is a well-known fact that since we have had to use so much arsenical spray in the control of our gipsy and browntail pests that a large proportion of our beneficial insects have been killed.

Of all the tens of millions of insects that visit flowers, the honey bee is the only one that man has been able to use with any degree of success, and is also the only one that in anywise approaches a dual purpose in aiding man in the production of his crops and also in giving him a finished product.

A bee can fly at the rate of twenty-five miles per hour, though its average rate is fifteen. A honey bee will

Child Development Project

Education through Play

On Friday January 16, Mrs. Ruth D. Morley, Extension Specialist in Child Development from the Massachusetts Agricultural College, held her fourth meeting with project leaders at the Essex County Agricultural School on Education Through Play. Mrs. Morley stressed the value of play in developing character, the responsibility of each parent, the classification of toys according to the child's age, and the effect, right and wrong toys may have on the child. In addition, she displayed a number of modern toys suitable for children of ranging ages.

In emphasizing the value of play Mrs. Morley showed very plainly how the muscular and sensory organs are developed through play, how moral and aesthetic values grow, and how mentality, character, and social living will advance through correct play.

"Play," writes Mrs. Morley, "is the child's heritage. Let us not deprive him of play but provide a play laboratory for his preparation for life, in which he can interpret his environment and relive a real world in a way that deepens his sense of reality."

Mrs. Morley, as mother of two growing children, is especially able to advise in her pleasing and efficient way all who are interested in doing the utmost for their children.

In addition to the project leaders representing West Andover, Lawrence, Beverly, Danvers, Saugus, and Cliftondale, three representatives from Salem Women's Association were guests. At the next meeting on February 13, Mrs. Morley will talk on Home Duties—Teaching the Child Cooperation.

carry a load of forty milligrams of nectar. It is necessary that bees make at least two hundred trips to produce an ounce of honey. They will visit flowers within a range of four miles. A worker bee has three simple eyes and two compound eyes. Each of the compound has 6,300 facets. A simple eye aids the bee in observing things within short range. Compound eyes are telescopic and permit the bee to locate flowers while flying about.

The life of the bee during the honey season generally lasts five or six weeks, while in off-season, during the winter, a bee will live as long as eight months.

—C. A. Meigs

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 12

HATHORNE, MASS., FEBRUARY, 1931

NO. 2

Varied Program for Farmers' and Homemakers' Day March 11th

All roads, and for each member of the family, will lead to Hathorne, March 11th. Once in Hathorne you'll have no trouble in finding the Agricultural School—the Essex County Agricultural School. And once there you'll witness the Seventeenth Annual Farmers' and Homemakers' Day. For the general morning speaker, starting at 10:30, we hope to present a man who will talk on Food Preservation and Refrigeration. This is a subject which concerns everybody in these days of food gluts and shortages. Housewives will be delighted with the freedom this process of refrigeration gives them. Their husbands will delight, too—in the taste of products as delicious as the freshest.

In the afternoon, starting at 1:30 in the basement of the Homemaking building, Mr. George E. Corwin, assistant in the Bureau of Animal Industry, State House, Boston, will discuss under diseases, their detection, prevention, and cure. During the lecture Mr. Corwin will give a demonstration of the Brom-Cresol test.

At 2:15, A. R. Parker of Brockton, a dealer who retains a standard price for consumers and producers, will talk on "Holding Consumers' Trade and Producers'." Mr. Parker will tell his methods of handling milk, of paying his patrons, and bacteria count bonuses.

At 2:45 Professor F. H. Branch of Amherst will talk briefly on "The 1931 Dairy Outlook."

At 3:00 P. M., M. V. Bailey of the American Cyanid Company, will discuss "New Ideas in Pasture Improvement."

In the main Assembly Hall of the Agricultural Building at 1:30 Professor Branch will give his talk on "1931 Dairy Outlook" for those unable to hear it at 2:45.

R. K. Clapp, of the State Farm Bureau, will exhibit the Burglar Alarm systems practical for poultrymen's uses.

The division of markets, State Department of Agriculture, will hold an egg marketing display.

J. Stanley Bennett, head of this School's Poultry Department, will demonstrate the "Stick Method" of vaccinating pullets for chicken-pox.

In Room 37 of the Agricultural Building, at 1:30 P. M., H. F. Thomp-

Library Exhibit to be Repeated Farmers' Day



SEE ARTICLE ON PAGE 3

son of Attleboro, will discuss "Marketing Plans that Pay." Mr. Thompson, a former Extension Specialist for Massachusetts, is an extensive gardener and operates a very successful roadside stand.

At 2:30, John Handy, Associate County Agricultural Agent of Middlesex County, will tell "How Vegetable Gardeners Can Co-operate."

At 2:45, Professor Harold Rowe will give a 15-minute talk on "The 1931 Dairy Outlook."

At 3 o'clock, "The Perishable Commodities Act" will be explained by Daniel Curran, Counsel, State Department of Agriculture, Boston.

In Room 38 of the Agricultural Building, at 1:30, John Chandler, President of Massachusetts Fruit-Growers Association, will specify "Successful Marketing Methods."

At 2:15, Professor Rowe will give his "1931 Dairy Outlook."

At 2:30, Walter Piper, of the Massachusetts Department of Agriculture, will discuss "Western Markets for New England Apples."

At 3 P. M., Prof. Wilbur H. Thies, Extension Specialist in Pomology, will give "The Conclusions from the 1930 90% Club."

In Room 25 of the Agricultural Building there will be an exhibit of the best pair of rabbits of various breeds as indicated by winners at the rabbit show recently held in Peabody City Hall.

4-H CLUB

The 4-H Club Department of Essex County is at your service, and should be in your community. Visit the exhibition on Farmers' Day in Room 26 of the main building. The map which will be on display will tell the story; find your community, then find out why there is no club work there. There are 75 communities in Essex County where Club work should be carried on, and at the present time there are only 40 carrying out the work of the projects. If you are looking for information, the day is March 11 and the place is Essex County Agricultural School. Come, and let's get acquainted.

WOMEN'S SECTION

In place of the usual exhibits prepared by the Home Demonstration Agent, she, with her assistants, will be "At Home" all day to the county women in Room 34 of the main Agricultural Building (second floor).

This will give an opportunity to explain extension projects and to show illustrated material used in conducting these projects. We expect Miss Crawford will thus have an occasion not possible in previous years to meet many old and new extension friends personally. A cordial invitation is extended to all homemakers to take this opportunity of getting acquainted

(Continued on page 2)

Essex Farmer and Homemaker

HATHORNE, MASS.

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CALENDAR

February 23-March 2. Recess for Homemaking Department.

February 27. Boys' Basketball at Bristol.

March 11. Annual Farmers' and Homemakers' Day.

Poultry Club Rally

The 4-H Poultry Clubs of Essex County will hold their second rally at the Essex County Agricultural School, Saturday, March 7, 1931.

The program starts at 10 A. M. with moving pictures. Following will be a talk by Mr. E. H. Nodine, Assistant State Club leader, an indoor track meet, the true story of a club boy's poultry project, and a judging contest with prizes. Bring your lunch and spend a day of educational recreation. Poultry club members, parents and friends are cordially invited.

—Horace Shute.

(Continued from page 1)

with workers in the extension department.

At 1:30, in the Homemaking Assembly Hall, there will be two main speakers, with two widely interesting subjects. A speaker on "Foods" will be announced later in the press. Following her lecture, Miss Barbara Poor, known as "Priscilla Pequot," of Salem, will discuss "The Romance of Cotton." The lecture will include a history of spinning and weaving as done at home, as in India, and by our American Indians. A discussion of present-day weaving and fabrics will follow.

Extensive departmental exhibits will be shown throughout the Homemaking Building.

Kindly watch the press for further notices on Floriculture and speakers thus far unannounced.

Time to Make a Change

If you have low-producing cows, or cows that are unprofitable for any reason, now is the time to make a change.

You may ask, "Why make a change now?" The answer is simple and based upon sound facts.

The price of milk is very low at present. Cows that paid a profit when milk was high in price, have dropped to the unprofitable class. It is impossible to feed a poor cow so that she can make a profit at the present condition of our milk market, particularly if we bear in mind that a poor cow is never very profitable even when the fluid milk price is at its best.

The price of surplus milk is such that it is decidedly unprofitable to send any extra milk above your "rating" to market. If you are producing milk so as to make a surplus, it is doubly important that you sell your poorer cows, because cows making milk today at a surplus price are costing you good money every day you keep them.

Possibly you are a little timid about getting down to your so-called "rating." Suppose you do get down under your "rating," what difference does that make to your pocketbook in the long run? The prices of dairy cows are getting cheaper every day. Last year at this time you paid \$180 to \$200 for the best dairy cows. Today the same cows can be bought for \$130 to \$150. If it becomes necessary for you to replace to keep up to your "rating," good cows can be purchased even cheaper later on.

Hence, to my mind the best dairying management that a dairy farmer can practice today is to cull his herd closely, to produce no surplus milk, and to purchase fresh cows when he needs them for keeping his milk up to "rating." I feel that this program will form the basis for the most profitable dairying possible under the present dairy prices. J. E. Eastwood.

Girls' Honor Roll

Miss Moore, acting head of the Homemaking Department, announces the girls' Honor Roll to include the following: (Those with 85 or better) —Stella Marchewska, Peabody; Bessie Manchester, North Andover; Kathryn Ingoldsbys, Salem; Pauline Ramsey, Haverhill; Elaine Pingree, Haverhill; Janice Wray, Methuen. (High School Specials with 83 or better) —Corinne Crowell, Methuen; Barbara Freeman, Salem; Eva Belcher, Danvers; Mary Hammond, Lawrence; Stonice Harvey, Lawrence; Jean Stowell, Methuen. (Honorable mention) —Edith Wilson, Methuen; Katherine Kolhonen, Peabody; Florence MacKenzie, Middleton; Pauline Bozek, Salem.

Boys' Basketball

To date, the Boys' Basketball team has been victorious in eleven of its thirteen games. The victories have been well-earned ones, and total 419 points against opponents 172. Following is schedule of the games thus far played: Alumni (45-13); St. Joseph's (27-11); Peabody (48-12); Lynn Y. M. C. A. (48-15); Haverhill (22-27); Sarnborn Seminary (34-23); Gloucester (38-21); Norfolk (44-24); Beverly (17-29); Peabody (30-25); Lynn Y. M. C. A. (52-10); Bristol (31-18); Stoneham (22-12).

Boys' Honor Roll

Instructor Mostrom, educational manager, has announced the second term Honor Roll, as follows:

Those coming under the credit group 20-21—*Robert Waters, Beverly; *Milton Snow, Lawrence; *Carl Swanson, Rockport.

Those coming under the credit group 19-20—*Harry Green, Rockport; *William Costley, Lynn; *Carlton Brown, Rockport; *Albert Doggart, Lawrence; D. Henry Williams, Lynn; *Nathan Clark, Swampscott; *Hyman Weinstein, Salem; *Dora Winchester, Saugus; *Ralph Broughton, Peabody.

Those coming under the credit group 18-19—Roland Shiers, Andover; *Walter Lewis, Andover; *George Perkins, Rockport; Robert Peterson, Gloucester; Carlton Symmes, Saugus; *Alfred Thompson, Amesbury; *Kenneth Sprague, North Andover; Lester Dixon, Andover; *Woodrow Follett, Lawrence; George Lambert, Boxford; Haigaz Kachadorian, Methuen; John Quinn, Peabody; *Donald Ryan, Swampscott; *Elmer Flanders, Rockport; Everett Nelson, Cliftondale; Peter Petkevich, Saugus; *Malcolm Spaulding, Newburyport; David Carter, Gloucester; Richard Jolliko, Rockport; William Murphy, Lynn; *Fred Anderson, Beverly; *Henry McLaughlin, Peabody; *Michael Pickowicz, Billerica; *Austin Basso, Andover; *Mortimer Brown, Marblehead; Alfred Webb, Andover; *Gilbert Weed, Lynn; William Carnavale, Lawrence; Theodore Frieswyk, Saugus; Albert Nunan, Saugus; *Samuel Frisone, Lynn; *Thomas Swinarski, Peabody.

*Those on first term roll as well.

Alumni Note of Interest

Oliver E. Holmes, class of '24, the School's most distant alumnus, writes from Cuba, on February 2nd, that he became father to a baby girl on September 21, 1930.

In Cuba the sugar-cane harvest started about the first of February, according to Mr. Holmes, and will last for three months.

4-H Dress Contest

The County Club Agent announces the Third Annual State and County Dress Contest for the 4-H Club girls. Many club members are planning to enter. From the enthusiasm shown by club members, it is expected that this contest will be the best ever. The rules for the county contest are as follows:

GENERAL

1. Contestants must have been enrolled in clothing club project during 1931.

2. Dress must be cut out and made entirely by the contestant. A statement of this should be signed by local leader or club agent.

3. Each exhibit should be accompanied by a cost record, including cost of pattern, material, and trimmings. Each exhibit must also be neatly labelled with name, address, age, and year of clothing club work.

4. Dresses eligible for prizes must be judged both off and on the girls.

5. Girls should not enter two classes unless county club agent approves. If competing in more than one class, contestant may receive only one prize.

SPECIAL

Class I—For girls 12 years of age and under.

Dress suitable for school, to be made of cotton material. (First prize winner in this class in 1930 county or sectional contest ineligible.)

Class II—For girls over 12 years of age.

Dress suitable for school with set-in sleeves, to be made of cotton material. (First prize winners in this class in 1930 county or sectional contest ineligible.)

Class III—For girls over 12 years of age who are taking Program D or more advanced work, and for other older girls approved by county club agent.

Dress suitable for informal party, to be made of cotton materials. Slip, also, must be made and entered with dress. (First prize winners in this class in 1930 county or sectional contest ineligible.)

Any garment not complying with the requirements will be disqualified upon the decision of the judge.

Club members should enroll before March 1st to be eligible for this contest. Last year 36 contestants submitted dresses which vied with those in many a shop. Enroll now!

Following the twelve county contests, a state contest will be held. At this time the state winners will be chosen from the group of about 40 county prize winners.

The state contest will take place in Worcester, in conjunction with the health contest, the latter part of June.

School Functions

At a joint-assembly arranged by the library committee, on January 29, Miss Mary Hyer Smith of the Library Division in the State Department of Education, well-informed on the kind of literature suitable for students, talked advisedly on "Books and People." Miss Smith stressed the fact that a broader scope is easily developed through reading a variety of types, including history, biography, adventure, and fiction. And "don't let the classics slip by."

The interest of the assembly was augmented by a perfectly splendid collection of books arranged by the library committee in tiers of six shelves at the front of the hall. Along the side wall hung two rows of magazines exhibiting all periodicals subscribed to by the School.

An assembly of this sort is inspirational as well as instructive to the students.

On Friday, January 30, students of the School were delightfully entertained by Alfred C. Hottes, associate editor of "Better Homes and Gardens," author, lecturer, and philosopher. Mr. Hottes, in giving his lecture on "Superlative Degree Plants," commanded a response as enthusiastic as his own delivery. He especially impressed the students with the idea of having outdoor plants make a house look natural in its natural place, and tutored them in the names of the best sorts of plants to be used for selected places. To facts on floriculture, Mr. Hottes added amusing accounts of travel, thus winning the students' complete approval.

Friday the 13th proved a lucky day for the School. "A Soldier's Valentine," written and directed by Instructor Metcalf, was presented with skill by members from the Sophomore Class and Kathleen Connelly, a High School Special, who gave a rare treat in novelty tap dancing.

Following the play, students danced to the tunes of the Merry Music Makers of Newburyport.

On Monday, February 16, two flags were presented to the Homemaking and Agricultural Departments by the G. A. R. Women's Auxiliary of Danvers.

An award of a trip to the National 4-H Club Congress at Chicago will be made to the girl scoring highest in the State. This trip includes participation in the National 4-H Dress Revue, at which time the state winners of all 4-H Dress Contests held in the United States, will exhibit their dresses. Here's your chance, girls!

—HORACE SHUTE.

Prune The Apple Tree

Pruning is necessary for the production of good fruit on the apple tree. No two trees are exactly the same and each tree needs particular attention in order to supply the kind of pruning it needs most. Pruning is so closely involved with fertilizing, soil management and tree growth, that specific directions will not fit every case. The combination of orchard management practices which produce vigorous but not excessive growth, and an abundance of fruit spurs is the objective; this combination is necessary in order to secure the maximum quantity of apples of high quality and finish.

Fruit growers prune their trees during the dormant season more than any other; between now and the opening of the buds should be a satisfactory time. A good tapered swivel saw should make most of the necessary cuts, hand pruning shears and a small cross-cut carpenter's saw should take care of the few remaining cuts.

In general, many small well-distributed cuts of less than one inch in diameter will exert a more beneficial effect upon the tree than the same amount of wood taken by fewer cuts. To prune lightly every year is sound practice; about 3 to 5 per cent of the tree is sufficient to remove according to this schedule. The careful pruner guards the fruit spurs like dollars, for he knows that it is from spurs only that he gets his crop of apples. Great care in working around a tree pays good dividends. By all means leave no stubs, for stubs indicate the work of a beginner and the short life of the tree.

Young trees need training in order to produce a strong framework, capacity for large crops and rapid growth. Trees trained according to the modified central leader seem to combine these good points and comparatively little pruning is necessary after the first few years.

On trees of bearing age the following classes of branches are most commonly removed:

1. Branches growing toward the center of the tree.
2. Crossing branches.
3. Parallel branches.
4. Branches with weak crotches.
5. Broken branches.
6. Water sprouts and suckers.
7. Superfluous branches from thick spots.
8. Shaded and very low branches.
9. Dead, diseased, and insect infested branches.

These classes of branches may serve as a guide in pruning the bearing apple tree.

—C. M. Wood.

Farmers' Day, March 11

Purchasing Points Subject of Lecture by Mrs. Esther Cooley Page

Mrs. Esther Cooley Page, State Clothing Specialist, conducted the last meeting in the Clothing Selection Course, on Thursday, February 12, at Marblehead.

Contrasting the clothing of the ages, Mrs. Page stressed the fact that materials today, attractive as they may be, are scarcely as durable as the silks worn by our grandmothers. Synthetic fabrics are as common as glass beads—or semi-precious stones. Are we buying silk or rayon? Is that woolly scarf we bought yesterday really made of wool, or is it patched up with ostrich feathers and rayon? If so, the imitations of today are too clever for most of us. Mrs. Page demonstrated ways of distinguishing between genuine silk and rayon by lighting small samples of each with a match and pointing out the rapid clear flame of the real and the slower flame of burning rayon. It is quite probable that any one of us who might attempt such a demonstration in a department store would be abruptly examined. But most stores today are willing to take their customers to a room where these proofs of material may be carried out. However, the safest way is to buy by well-known and established labels.

An extremely practical way of ironing hems and creases was explained by Mrs. Page. First, steam the covered article with an iron, then slap, with a wooden block (about 6" x 8") the hems or creases. For the shoulders of dress or suit sleeves insert a hard pin-cushion and apply the same method as for hems. It leaves them smooth and even.

Mrs. Page also discussed the proper times for shopping, the lines in dresses we must watch for (especially diagonals this spring), and the colors. Cowl necklines will still be worn all summer, and shades of rose, gray, blue, and bittersweet are bound to be popular. Buttons will match the belts in color, and all dresses will have pockets. Spun materials and unpressed gored skirts will hold sway among the smarter sets. Dresses loaned by Almy, Bigelow and Washburn's store in Salem were exhibited for samples.

Round About the County in March

March 3—Vegetable Preparation, Saugus. Garment Making, Andover.

March 5—Children's Coats and Hats, Hathorne. Vegetable Preparation, Lynnfield Center.

March 10—Garment Making, Andover.

March 11—Farmers' and Homemakers' Day.

North Andover Holds Community Meal Meeting

Miss May E. Foley, State Nutrition Specialist, conducted for a second time the community meal meeting in North Andover. Her object was to give menus and recipes attractive for church and grange suppers. These recipes are being printed by Miss Foley, by request, as follows:

Cream Dressing

- 1 cup cream (sweet or sour)
or evaporated milk
- 4 tablespoons vinegar
- 1 teaspoon salt
- 1½ teaspoon mustard
- Dash of pepper
- 1 tablespoon sugar

Beat the cream with an egg beater until smooth, thick and light. Mix the other ingredients together and gradually add to the cream, beating all the while. This dressing may be modified to suit different vegetables. Having beaten sour cream for a foundation the seasoning may be anything desired, as, for example, the mustard and vinegar may be omitted and the dressing be seasoned highly with any kind of catsup. One tablespoon of celery seed added to this dressing makes a very good cabbage dressing.

Pineapple Ice Box Cake

- 1 level tablespoon gelatin
- ¼ cup cold water
- ½ can crushed canned pineapple
- Pinch of salt
- ¼ cup sugar
- ½ tablespoon lemon juice
- 1 cup cream, whipped, or
- 1 cup evaporated milk, whipped

Lady fingers or stale sponge cake Soak gelatin in cold water five minutes, dissolve over hot water and add pineapple, sugar, salt and lemon juice. Stir until all gelatin and sugar have been dissolved. When it begins to thicken, beat and fold in cream or evaporated milk. Line sides and bottom of large square or round mold with lady fingers. Cover with pineapple cream mixture, then alternate cakes and cream until mold is full. Place in ice box and let stand three or four hours. Unmold on a large cake plate and garnish with whipped cream and strawberries in season. Serves eight.

March 12—Child Feeding.

March 13—Better Kitchens, Cliftondale.

March 17—Advisory Council, Essex County Agricultural School.

March 18—Garment Making, Andover. Better Kitchens, Middleton.

March 20—Vegetable Preparation, Topsfield.

March 24—County Clothing Clinic, Essex County Agricultural School.

March 25—Vegetable Preparation, Newbury.

March 29—"Rooms of a Homelike House," West Haverhill.

Manger Feeding Three Times More Expensive

John Abbott, agronomist of the National Fertilizer Association, presented very clearly the arguments for the fertilization and management of pastures, at a talk in Plymouth County. These facts are worthy of careful consideration by every dairyman in Essex County.

"Manger feeding," said Mr. Abbott, "is at least three times as expensive as pasture feeding when the additional cost of the labor and materials are taken into consideration. For this reason it is better to spend money improving pasture, or even to use some hay and land for pasture, than to depend upon manger feeding at any time during the year when pasture feeding is possible.

To buy feed in winter and to pasture in summer is better economy than to buy feed in summer and raise it for winter.

"In Europe the best land is used for pasture and they make more money from it than from any other crop.

"Unfertilized grass contains 12 per cent protein, as compared with 21 per cent protein for fertilized grass. Thus it will be seen that fertilized pasture grasses, on a dry matter basis, are the equivalent of many dairy rations.

"One hundred pounds of protein from fertilized pasture costs approximately \$3.50. In the form of grain, hay, or silage, it costs about \$10.

"For the best results a complete fertilizer plus lime should be used. From over 100 tests we have an average yield of 1,000 pounds of grass (dry weight) containing 177 pounds of protein on unfertilized pasture; and 2,501 pounds of grass containing 488 pounds of protein on pasture given complete fertilizer and lime.

"These same tests show an increase of \$50 worth of feed per acre with the application of \$15 worth of fertilizer.

"Good pasture management is just as important as fertilizer. Keep good pastures fenced into comparatively small areas, and alternate the feeding of them.

"Pick out one good field this year and fertilize it heavily. It will be ready to pasture ten days earlier than usual. Alternate the feeding of this field with that of your old pasture.

"Cut a well-fertilized hay-field early and pasture the rowen on this in August, or use sweet clover for mid-summer feed."

—F. C. SMITH.

Orange, Apple, and Cranberry Relish

- 1 orange, ground (skin and all)
- ½ cup sugar
- 1 cup apple (ground in skin)
- 1 cup ground raw cranberries

Stir all together and let stand at least one hour.

ESSEX FARMER AND HOMEMAKER

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NO. 3

Creditable Progress of Young Farmers

The Essex Chapter of the Massachusetts Young Farmers' Association has objectives similar to those of the National organization known as the Future Farmers of America, with the additional aim to provide good will and team work among all agencies participating in educational, economic, social, and rural work sponsored by the Federal government and popularly known as "Smith-Lever" and "Smith-Hughes" work. There are 115 students in the Essex County Agricultural School at the present time, who carry out the worthy program of work which follows:

1. To send teams to Local and State Judging and Demonstration Contests.
2. To conduct project tours.
3. To present an agricultural play.
4. To participate in Public Speaking Contests.
5. To promote savings accounts and thrift.
6. To support County Fairs.
7. To send delegates to M. Y. F. A. State Meetings.
8. To hold at least monthly meetings in Beekeeping, Floriculture, Poultry, Livestock, and Ornamental Gardening during the School year.
9. To hold seasonal Fruit and Vegetable Sectional Meetings.
10. To hold an annual Science day.
11. To promote interest and participate in co-operative buying and selling.
12. To conduct community improvement projects.
13. To aid in arranging for evening classes for adult farmers.

On March 25th of 1930, eighty-one Young Farmers organized the Essex Chapter. The present officers are as follows: President, Lawrence Westcott, Melrose; Vice-President, Donald Bentley, Methuen; Secretary, Robert Bartlett, Beverly; Treasurer, Milton Snow, Lawrence; Reporter, Harold Rowen, Ipswich; Faculty Advisors, J. E. Eastwood and E. E. Metcalf. The membership is made up entirely of students of the Essex County Agricultural School, Hathorne, Mass., which is headquarters for the Smith-Hughes and Smith-Lever work for Essex County.

Disposal of Profits

Money received from sales enterprises sponsored by the Young Farmers is used to good advantage. Profits made by the Topsfield Fair sales

booth in 1930 sent vegetable and fruit judging teams to the Brockton Fair, where they made a creditable showing. Two project tours were effected. On July 8th, twenty Freshmen visited and inspected the vegetable gardening projects of six of their classmates. The second project tour carried twenty-two students to five student projects, where dairy, poultry, fruit, vegetables, and greenhouse work were in active progress. More than general interest urged the young farmers to compare project notes and get first-hand information on the stories reported by project owners. A sense of co-operation, the key-note of the Young Farmers' aim, was better realized.

Summer plans in which the Young Farmers are to participate are already under way. Two of the boys have been chosen to operate the Half-Way Roadside Stand, located on the Newburyport Turnpike near Preston Street, and recently purchased by the organization. Several members are planning to put up a series of exhibits at the 1931 Topsfield Fair, showing the type of projects carried on during the summer. Appropriate signs designating what the project really means to the agricultural student, will be posted.

An added enterprise of the Young Farmers, which enables their sending judging and public speaking teams to Worcester, Brockton, M. A. C., Springfield, and Boston Poultry Shows, has been the daily sale of ice cream for the past three months, clearing a profit of approximately fifty dollars. A gasoline tank is also being managed by the boys as a means of adding to the organization's treasury as well as reducing the students' transit expenses.

A casual examination of the program of work shows increasing interest among the Young Farmers and creditable progress, with an outlook of success in fulfilling their ideals.

Requests Accepted for Letters on Home Gardens

Monthly letters, written by the specialists of Massachusetts Agricultural College, are being sent out through the School Extension Staff to people interested in the Home Garden. Over three hundred names desiring this service have already been received.

Farmers' Day Highly Successful

Farmers' Day was vastly more interesting this year than ever before. A wider range of trade exhibits, school displays, and topics for discussion drew the attention of an assemblage approaching thirteen hundred agricultural and homemaking enthusiasts.

Of particular interest was the display of frozen foods by the General Foods Corporation of Gloucester. An explanation of the Birdseye Method of freezing fish, meats, vegetables and fruits, was aptly presented by Mr. Karl Norton, research chemist of the General Foods Corporation. Following his discussion, Miss Bertha Nettleton, of this same concern, offered a demonstration of meals from frozen foods. Beefsteak, fish fillets, and peas, all cooked during Miss Nettleton's lecture, were afterwards sampled with great degrees of relish, as were fresh frozen raspberries.

The Extension Department is also praiseworthy for its displays and co-operation in advising both farmers and homemakers in problems pertaining to poultry, dairying, 4-H work, and household affairs.

Nor is the Homemaking department to be soon forgotten. Exhibits of clothing, including aprons, dresses, pajamas of the most fashionable type, and even winter coats of heavy materials, made by the girls, were artistically arranged. Displays of table decorations for dinner parties and St. Patrick Day luncheons, were the means of suggesting new ideas to the homemaker who racks her brain in vain for novelties in that line.

Outstanding Facts

Gathering outstanding facts from the Farmers' Day speakers, agriculturists learned that poultrymen of Essex County should interest themselves in prevention and not attempt any cures in poultry diseases; that the efficient dairy producer would get by in 1931; that there are three essentials for the successful marketing of apples, as follows: (1) good fruit, (2) good reputation, and (3) identified fruit; that the possibility of marketing New England apples in the West lies in the fact that McIntosh apples are not known west of New York; that the fruit and vegetable outlook would improve slowly with time and that quality will be consid-

(Continued on page 4)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

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Entered as second-class matter, May 28, 1919, at the post office at Hathorne, Mass. under the Act of August 24, 1912.

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CALENDAR

May 23—Junior High School Field Day.

System of Land-Grant Colleges

"A nation-wide teacher-training program administered by the system of Land-Grant colleges is functioning more efficiently than ever before."

Dr. H. C. Lane reports as follows: "Each of the Land-Grant colleges has been designated by the State Board for Vocational Education to train agricultural teachers. Emphasis is placed at those institutions upon the careful selection and training of prospective teachers. Many of the candidates for the teaching of agriculture are selected young men trained in public school departments of vocational agriculture previous to enrollment for college training. . . . Pre-employment training students require that prospective teachers have practical farm experience, preferably of a responsible, managerial type, professional training in the methods and procedures of the job; and technical training in agriculture as provided in the four-year course of a standard Land-Grant college. Pre-employment teacher training appears as a major responsibility of the Land-Grant colleges. Data for 1928 and 1929 reveals that 34.2 per cent of the 1,834 agricultural college graduates were specially prepared to teach vocational agriculture, and that of the number so prepared to teach, 71.5 per cent were placed as teachers of vocational agriculture."

New Manager in the Dairy Division

The Trustees have appointed Roy Fleming as herdsman in charge of the herd and dairy. He is a native

of Kansas and a graduate of the Kansas State Agricultural College. Since graduation he has worked continuously in herd management, having had charge of several valuable herds and some very fine stock in the eastern part of the United States.

Alumni Notes

Alexander MacDonald, president of the Alumni Association and a member of the Class of 1920, announces that plans for an alumni Spring dance are under way. Watch for a complete announcement in the press early in April. Incidentally, Mr. MacDonald is now manager of the Swan and Berndtson florists' concern, at 348 Jackson Street, Lawrence.

Roy Frost, class of '27, has charge of a test herd at the Rockingham, Farm, Canobie Lake, Salem, N. H.

Dorothy Wilson, Edna Bamford, and Helen Lendall, class of '29, are employed at Lang's millinery shop in Salem.

In Memoriam

With deepest regret the School is printing the following notices:

Mrs. Edna Belcher, wife of William W. Belcher, died at the Beverly Hospital on Tuesday, March 10th.

Mrs. Carrie (Day) Tucker, wife of F. Maynard Tucker, of the Class of 1920, passed away at Gloucester in February, 1931.

Farm Machine Shop, New Development

Twenty-six boys volunteered to enroll in Mr. William A. Stuart's farm machine ten-week course. Mr. Stuart, of the Harper Garage Company in Beverly, has just brought his course to a close, having extended it four weeks beyond his original contract.

Tractors, cement mixers, spraying machines, trucks of various makes, and several Fords, Buicks, and Maxwells have been efficiently repaired or overhauled after winter storage, by these boys under the supervision of Mr. Stuart.

The course is a new one which the School expects to continue next year.

After carefully watching the diet of the school child, it is important to have such temptations as hot dogs, cheap candies and tamales removed from the vicinity of the school.—*Hygeia*.

News of the School at a Glance

Friday, Feb. 20—With no exaggeration, the Senior dance was brilliantly successful.

Wednesday, March 4—Prof. J. H. Frandsen, of M. A. C., gave an illustrated lecture on "Glimpses of Agriculture Across the Country."

Thursday, March 5—Rev. Karl H. Kopf, pastor of the Crombie Street Church in Salem, entertained the students with accounts of his trip through the Painted Desert, illustrating with delightfully colored slides.

Monday, March 16—Members of the Haverhill 4-H Club orchestra, under the supervision of Ernest Howard, gave a varied program of orchestral and solo numbers. The orchestra totals twenty-eight 4-H boys between the ages of eight and fourteen, and includes boys of eight nationalities, who play the piano, violin, drums, saxophone, banjo, and cornet. Accordion and harmonica solos were rendered by two boys not in the orchestra.

Tuesday, March 17—Miss Ethel Moore, head of the Homemaking Department, and Miss Margaret Harris, instructor in Art, discussed "The Advantages of a Homemaking Course," and "Curtains Appropriate for All Rooms of the Home," at the First Baptist Church in Salem.

Instructor Metcalf's class held a political rally in the morning assembly. Candidates running for the board of selectmen and dog-catcher in the town of Hathorne, left select impressions.

Wednesday, March 18—Viola Meser, '29, and Margaret Gordon, '30, both of Methuen, were awarded Bal-four keys as representatives of students with marked excellence in scholarship, loyalty, and achievement in their respective classes.

Alvin Courant of Gloucester, Hyman Weinstein and Robert Davis, both of Salem, represented the School in a public speaking contest at the Norfolk County Agricultural School. The boys, though disappointed in not making a place, congratulate the winners from Norfolk and Bristol.

It was announced in assembly that Bradford Webb of Andover has been awarded a sixty dollar scholarship for further education at Massachusetts Agricultural College, offered by the Massachusetts Fruit Growers Association, for obtaining the highest average in 4-H Club fruit work, and excelling in the fruit-judging contests at Brockton Fair, Massachusetts Agricultural College, and at the Union Agricultural Meetings at Worcester. The Young Farmers made it possible to enter these contests by helping finance the trips.

Dairymen Meet and Organize New Association

At the annual meeting of the Essex County Dairy Herd Improvement Association held on Friday, February 27, Secretary-Treasurer F. C. Smith reported a membership of 25, and a total of one hundred and thirty-six dollars (\$136) in the treasury. The following officers for the ensuing year were re-elected: President, Charles S. Moxley, North Andover; Vice-President, John Chadwick, West Boxford; Secretary-Treasurer, F. C. Smith, Hathorne; Directors, C. D. Abbot, Andover, Harvey Turner, Andover.

It was voted to have the Association year start on March 1st in preference to January 1st.

A County Dairymen's

Association was organized after some discussion. County Agent Smith offered suggested by-laws. These laws had been previously prepared by dairymen at the home of C. S. Moxley. With the association organized, a fee of one dollar (\$1) per year was decided upon, with four regular yearly meetings. The purpose of the association is to protect, promote, and present accurate information, and to help advertise the dairy industry in Essex County.

The elected officers are: President, Harvey Turner; Vice-President, R. J. MacKenzie, Ipswich; Secretary-Treasurer, E. J. Montague, Topsfield; Executive Committee, Miss Jane Shattuck, Topsfield; John Chadwick, West Boxford; and Silas Little, Sr., Newburyport.

After the organization meeting, Professor V. A. Rice, head of animal husbandry at M. A. C., gave an interesting discussion on breeding, and demonstrated the herediscope, a mechanical device for graphically illustrating fundamental processes of breeding. He was assisted by C. J. Fawcett.

Professor Graham Gives Poultry Outlook

Professor J. C. Graham, head of the Poultry Department of the Massachusetts Agricultural College, spoke to a group of poultrymen at the Essex County Agricultural School on February 27.

Predictions for 1931 are that fewer chicks will be hatched in the United States and that fewer eggs will be stored. Prices for eggs should average slightly higher than for several years.

A comparison of 1912 poultry and feed prices with present conditions showed that grain costs are approximately equal, while receipts for baby chicks, live and dressed poultry, eggs, and mature pullets were all higher

for 1930. Poultrymen today are able to hatch more of the eggs set because of improved breeding, feeding practices, and more efficient incubators. Larger percentages of chicks are raised by better means of brooding and feeding methods, and higher egg production is now obtained.

John E. Millmore.

Massachusetts Proved Dairy Sire Program

The dairy industry occupies a very important place in the agriculture of Massachusetts. Its greatest need at the present time is, no doubt, better cows. It has been shown that a cow must produce at least 7000 pounds of milk yearly in order to be profitable. The average for all cows in Massachusetts is about 5,000 pounds yearly. Herd Improvement Associations were organized in order to provide a relatively inexpensive method of testing cows so that their yearly records might be obtained and the unprofitable cows weeded out. The Herd Improvement Associations can easily find the unprofitable cows in any herd. Difficulty is encountered, however, in finding profitable ones to replace those which are weeded out. What can be done to stop the breeding of so many poor producing cows and to increase the number of high producing cows bred? Science and practice both indicate that this can best be accomplished by means of a Proved Sire Program. Many good bulls have gone to the butcher at a comparatively young age because their worth, as measured by their daughters' production, is not apparent for several years. The Proved Sire program would eliminate this economic waste.

Methods for Selecting Breeding Bulls

There are various methods in vogue for selecting breeding bulls. One is on the basis of the bull's own individuality. A bull's general appearance is, however, a very unsafe guide as to the probable production of his daughters. Another method is by the bull's pedigree. This, admittedly, is better than the first method, but it is nevertheless very far from scientific accuracy. True, young bulls of good type and good pedigree should be selected, but they then should be put to the only real test of a breeding dairy sire by comparing the production of their daughters to that of the dams of those daughters, with all records corrected to standard age and conditions. It is proposed to offer to Massachusetts cattle breeders and dairymen the opportunity to test sires through the Massachusetts Proved Sire Program.

Detailed information as to the service obtainable through the Proved

Sire Program may be secured through County Agricultural Agent F. C. Smith, Hathorne, Massachusetts.

—F. C. Smith.

Getting Mosquitoes in Hand

Mosquito control along the Massachusetts coast, under the special appropriation of \$270,000 by the State legislature, has recently assumed a more definite aspect through the appointment by the State Reclamation Board of three commissioners for the Bristol-South Plymouth mosquito control project. The \$270,000 was appropriated in response to the recommendation of Governor Ely for the relief of unemployment, and the Reclamation Board decided to make work available in this area first, as the need there appears to be greatest.

The Board named Capt. Frederick A. Gower of Fall River, Thomas W. Whitefield of Fairhaven, and James T. Hennessey of Wareham, as the commissioners for this project. These gentlemen are outlining the steps which are to be taken to provide immediate employment for a large number of men.

The Reclamation Board will not employ any of the help, but has made a provision for systematizing the employment, so that the most needy cases can be taken care of first. An office will be established in the district by the commissioners promptly. All applicants for work should present themselves at this office, where all help will be employed.

The Bristol-South Plymouth project includes the seaboard towns from Narragansett Bay to Wareham, with the exception of Marion.

Essex County Census Facts

	1930	1920
Number of farms	2,024	2,966
Acres land in farms	117,113	148,541
Acres per farm	57.9	50.1
Value land and buildings		
per farm	\$13,243.00	\$10,928.00
Value per acre	\$228.88	\$218.20
<i>Size of Farms</i>		
Under 3 acres	154	306
3 to 9 acres	362	615
10 to 19 acres	334	464
20 to 49 acres	496	712
50 to 99 acres	366	453
100 to 174 acres	177	223
175 to 239 acres	69	79
240 to 499 acres	45	59
500 to 999 acres	17	20
1000 or more acres	4	5
<i>Livestock</i>		
Horses	1,683	4,117
Cattle	12,191	17,338
Hogs	5,942	9,012
Chickens	190,652	154,763

—F. C. Smith.

Wrong Labels, Misleading Advertisements

Many times false or misleading labels put on articles by manufacturers have been found the cause of confusion by advertising departments and have led to false or inaccurate retail advertisements.

Three recent illustrations arising in Boston are:

Women's Coats were advertised as "Camel Pile" and labelled "Camel Pile—Genuine Kornella." One secured and tested by the Bureau proved to be camel's hair and wool. Through the National Better Business Bureau this manufacturer agreed to eliminate the description "Camel Pile."

In another case, men's underwear bore a label which read "Braecroft Part Wool." In one purchased and tested by the Bureau there was so little wool if any that it could not be detected. It was cotton. This manufacturer agreed to specify on labels the actual percentage of materials.

Neckties advertised as "Imported Silk" were labelled "Imported Silk," but in reality were silk and rayon. The retail store had been misled. The manufacturer also claimed to have been misled. He, however, assured the Bureau that "Imported Silk" labels would not be used on this neckwear again.

These are only three of many similar cases encountered by the Boston Bureau. They are mentioned here to illustrate the scope and final disposition of some of the advertising investigations by the Better Business Bureau with the aid of the National and other bureaus.

Saugus Women Busy

Saugus women have been busy during March, carrying four Extension projects successfully. Twenty-five women are enrolled in the Vegetable Preparation project; twenty-two in Better Kitchens; eleven in the Children's Clothes; and twelve in the Child Development.

School Lunch Box

It seemed wise to postpone the School Lunch Box project until the Spring months. Now we are ready to give this help to women who have the problem of packing school lunch boxes. The two meetings, to be held April 7 and April 28 in the Ipswich Congregational Parish House on County Street, will be conducted by Miss May E. Foley, Extension Nutritionist. Not only will she give suggestions for the school lunch box, but she will also include material con-

cerning the child's health through right feeding. At the first meeting, sandwich-making will be demonstrated. At the second, foods which should be included in the lunch will be discussed, together with attractive methods for packing the lunch box.

The meetings are scheduled to begin at 2 P. M. All homemakers are cordially invited to attend.

Granges to Co-operate with 4-H Garden Clubs

Many granges in Essex County are offering cash prizes to the boy or girl in the community who raises the best garden this year.

Boys and girls can't afford to miss this excellent opportunity. Enroll now, either by writing the County Club agent or by seeing the local leader in your town. To be eligible for the grange prizes, the following requirements are to be met: First-year Club members must have five hundred square feet of land and plant at least five varieties of vegetables. A record of all expenses and receipts throughout the summer must be kept and given to the County Club agent.

Laurel, Georgetown, Rowley, and West Newbury granges have already agreed to offer prizes and have appointed a committee to visit the gardens. The West Newbury grange is offering its prize for the best vegetable exhibit at the grange fair.

Enroll now and make plans for the best garden in your town.

—Horace J. Shute,

Essex County Dress Contest

The Essex County Dress Contest will be held on Junior 4-H Field Day, Saturday, June 13, 1931.

The enthusiasm in this contest has spread like wildfire all over the county, with ninety girls already enrolled, nearly three times the number of last year. These girls belong to clubs in the following towns: Ballardvale, West Boxford, and Methuen; Groveland, South Groveland, and Georgetown; Blyfield, West Newbury, and Ipswich; Gloucester, Danvers and Beverly.

Because of such a large number of contestants, it will be necessary to hold elimination contests at local exhibits. Only the dresses chosen at these exhibits will be allowed to enter the county-wide contest.

The girls are all working hard to win a county prize and it is expected that this year's contest will be very close and hard to win, as the workmanship in the garments already made is nearly perfect.

The girls winning first prize in each of the three classes will enter the state contest at Worcester. Medals and ribbons will be awarded the three highest in each class in the county contest.

—Horace J. Shute,
County Club Agent.

Over 200 Visit Miss Crawford on Farmers' Day

Over two hundred women were entertained by the Home Demonstration Agent and her assistants on Farmers' and Homemakers' Day. In her exhibit room, Miss Crawford had arranged material showing a model kitchen closet, a miniature window with curtains appropriate for the kitchen, a medicine cabinet for the home, garments used in adult and children's clothes work, materials used for furniture renovation, and a chart showing food values.

Light refreshments consisted of fruit punch and sandwiches, of raw spinach, celery and egg, and raisin, date and nut. These sandwiches have been suggested for the school lunch box. Following is the fruit punch recipe:

8 cups sugar
16 cups water
Grated rinds of 2 lemons
Grated rinds of 2 oranges
Juice of 2 oranges
Juice of 2 lemons
2 quarts grape juice
8 6½-oz. bottles ginger ale
1 cup maraschino cherries
2 cups apricot pulp
Pulp of 2 bananas

Boil sugar and water together 5 minutes. Add rinds. Continue cooking 5 minutes. Strain. Combine with fruit juices, thinly sliced cherries, and banana and apricot pulps. Chill. Pour into bowl containing block of ice. Add gradually the ginger ale. Serves 50 people.

—M. P. Crawford.

FARMERS' DAY HIGHLY SUCCESSFUL

(Continued from page 1)

ered for immediate sales; that careful judgment should be used in planting crops this season without an increase in acreage; that fitting color combinations should be considered in planting flower gardens; and that Japanese lilies collected from Japan are more successfully grown than high-priced ones bought in this country.

It only remains to be said that Farmers' and Homemakers' Days are increasing in popularity among the earnest agriculturists who are interested in promoting an occupation which is rapidly becoming one of the foremost in New England.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 12

HATHORNE, MASS., APRIL, 1931

No. 4

Little Family Doing Large Things

With times as uncertain as they are, we can be sure of one thing. The little things in life are those that count. Silas, Jr., and Justin Little, sons of Mr. and Mrs. Silas Little of Newbury, have been prominent in 4-H Club work for the past six years. Under the guidance of their father, President of the Essex County Local Leaders Association, and their mother, a comrade who assists in club and home problems, these boys have attained honor and prestige, not only in 4-H but in their school and community as well.

As members of dairy, poultry, forestry, and garden clubs, these enthusiastic young farmers have become efficient in producing superior cattle, chickens and hens, and a variety of vegetables. In 1930 Silas Jr. won two medals for the best cockerel and pullet in the Topsfield Fair 4-H exhibit, and a silver trophy for the finest pen of hens. Added to these, a total of seventy ribbons won during his 4-H career, seal the truth that Silas has proved himself worthy of his 4-H pledge. With arrangements completed for entering Massachusetts Agricultural College this Fall, he plans to further his agricultural interests in still more advanced lines.

Justin, a younger brother of Silas, and equally anxious to fulfill the ideals of the club, is raising and caring for a pen of 100 Rhode Island Reds, 2 grade cows, 1 pure-bred heifer, 1 pure-bred bull, and 1 Ohio improved Chester white pig weighing 300 pounds. Forty-eight ribbons are neatly stored away to certify Justin's success. Last year he was awarded a pure-bred rooster for the best 4-H display of Rhode Island Reds at the Topsfield Fair. A vegetable garden display, made up by both boys, brought a profit of about forty dollars, and at the Brockton Fair their cattle, poultry, and pig exhibits profited them ninety-eight dollars.

This year they are planning to have larger and more splendid exhibits at both Fairs. Success seems to follow on their heels, as success

will when given any encouragement at all. Every 4-H Club member is urged to equal the standards set by these Little boys, "To Make the Best Better."

School Nursery Starts

The School nursery is now able to supply citizens with a limited amount of its products. If interested in apples, pears, peaches, raspberries, strawberries, or grapevines, please ask us for particulars.

Scientific Housewives in the Making



The picture above exemplifies a foods laboratory of Dutch cleanliness. Modern cooking with a reason and a purpose, as taught in the Homemaking Department, is bringing results of a longed-for simplicity.

Baby Chick Project

Twenty-four hundred baby chicks have already been reported by fourteen 4-H Club members. These chickens all come from tested stock. The enrollments are still coming in. If you are raising chickens and want to join the Baby Chick Club, all you have to do is to care for at least fifty chickens which have come from stock tested for Pullorum (B. W. D.), and drop a line to the County Club agent now, giving your age and the number of chicks you have. Also state that you are desirous of joining the Baby Chick Club. All enrollments must be in by May 1. —H. J. Shute.

Junior High School Field Day

Once again the Essex County Agricultural School invites members of the graduating classes, Junior High Schools, and students of the eighth grade, to attend a Junior High School Day to be held on Saturday, May 23rd. The day is an entertaining as well as educational one. There will be an opportunity to visit all parts of the 120-acre well-kept farm and its buildings; see the equipment and exhibits; and participate in an afternoon program of interesting contests and events. Plan to devote

a full day, Saturday, May 23rd, for this program. All teachers and parents are cordially invited.

The program will be as follows:

9-10:30 A. M.—Registration.
9:15-11:00 A. M.—Trips over School farm, Homemaking and Agricultural buildings open for convenience of guests for inspection.

10-11:45 A. M.—Bird, Branch, and Wild Flower Contests.

11:45 A. M. to 12:30 P. M.—Haverhill 4-H Club Orchestra and Fun Stunts. Attention is called to the "Horribles Parade" which anyone may enter providing he brings his own costume.

1:30-4:00 P. M.—Athletic events, or Indoor Program if rainy.

4:00 P. M.—Awarding prizes.

Library Grows in Usefulness

A recent addition to our School Library equipment made by the Farm Shop Department, is a magazine rack. In its seven deep pockets it is possible to display thirty or more different magazines of the fifty-two to which the library subscribes. The depth of the pockets holds several of the more recent issues of each and is proving a real help in increasing the use made of this branch of the library.

New books are being added constantly by purchase from library funds. Of late, several books of fiction have been given to the library which are proving popular with the boys.
—Instructor A. L. Dacy.

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Horace J. Shute

CALENDAR

April 24—May 14—Homemaking recess.
May 23—Junior High School Field Day.
June 6—4-H Club Field Day.
June 10—Better Homes Day.
June 16—Parents' Day.

In Depression Let Children Suffer Last

Larger Classes, Decreased Support, Abbreviated Terms, Closed Doors, Threaten American Schools

Many of the gains made by the schools during the past decade will be lost unless the American people adopt the policy of letting children be the last to suffer from the present depression.

In one state it is seriously proposed to close the doors of every school for a year. Another state has just voted away its fundamental tax provision for schools without substituting any other means of support.

It is proposed in other places to reduce the length of the school term. Classes are being increased in size until they cannot be handled effectively; appropriations for teaching and equipment are being reduced—the services of the schools weakened.

At no time in the history of our nation has the unifying and stabilizing influence of the schools been so greatly needed. Upon the schools the nation depends largely for developing loyalty to the institutions and principles of American government.

The schools promote loyalty to American ideals. They teach respect for law and the Constitution, admiration for our great national heroes, and a knowledge of the nation's struggles for freedom and independence. They make our diverse peoples one.

They develop the vocational skills

which are necessary to fit our citizens to the new conditions and demands of industry. They foster the ideals and habits of character which are needed to meet the peculiar temptations and conditions of today's life.

Educational leaders feel that it would be a great mistake at this critical period to weaken the services of the institution upon which we must rely in large measure to correct the adverse conditions which now exist among our people.

Credit for this material is due the "Journal of the National Education Association."

In Memoriam

Friends of the School in general, and members of the Class of 1930 in particular, will be very much grieved to learn of the death of Lester M. Knowlton. Mr. Knowlton died at the Beverly Hospital on March 26, 1931.

Since graduation Mr. Knowlton has worked on the farm of Trustee Robert H. Sawyer, and for the past few months had been serving as cow tester for the Essex County Dairy Herd Improvement Association.

Poultry Outlook for 1931

It is possible that egg prices have already touched their lowest level for this Spring, and if so, returns for cost of production are more favorable than a year ago at this time. Prices for fowl are increasing, and the broiler outlook appears favorable. Late summer eggs should bring good prices, because there seem to be few early hatched pullets. Incidentally, there will be comparatively few May hatched pullets, which indicates a smaller number of late winter and spring eggs next year. With reduced mid-western flocks (heavy contributors during the late winter-spring period) the outlook is optimistic for Essex county. With real improvement in the employment situation by Fall a good year is practically assured.

—J. Stanley Bennett.

A neat folder announcing the dates of the principal fairs in Massachusetts for 1931 has been published by the Division of Reclamation, Soil Survey and Fairs of the State Department of Agriculture. The folder may be had on request to L. B. Boston, Director of the Division, State House, Boston. The brochure also contains interesting announcements regarding fairs of the past season, and plans for this one.

News of the School at a Glance

April 2

The Freshman class, with its President, Chester Ellis, in charge, conducted the regular morning assembly. Alexander Dixon of Salem, read an essay based on his visit to the flower show. A poem entitled "Opportunity," was recited by William Carnevale of Lawrence. Edward Brown of Marblehead displayed marked talent in rendering a violin selection, accompanied by Miss Alice Sayles of the Homemaking Department. "A Year at Essex Aggie" was reviewed by Bruce Platt of Saugus. Gilbert Weed of Lynn chose for his topic, "The Surf." A banjo selection, rendered by Edward Glowacki of Lawrence, added spice to the program. Thomas Mortimer of Danvers brought the assembly to a close with a challenge for better rural fire protection.

Fifteen girls of the Senior, Junior, and High School Special groups entertained over two hundred members of the Essex Pomona Grange and visiting patrons at Newburyport. A first group displayed salads especially appropriate for Spring and Summer, using vegetables or fruits for light salads and crab meat for more hearty ones. Accompanying rolls and crackers were also suggested.

A second group, with Ruth Bresnahan of Salem, a student of the Homemaking Department, representing the owner of a shop, presented a fashion show, displaying silk dresses, beach pajamas, evening gowns, and small children's dresses, all made by the girls in their Clothing classes. Color, line, and design for individual types were especially stressed.

April 7

Mrs. Marion Rudkin, story-teller at the Beverly Public Library, started a course for the Homemaking girls, in the art of story-telling. She has arranged to be with the girls each Tuesday, Wednesday, and Thursday in April, devoting her time to first illustrating her points with stories suitable for children of pre-school age, and then hearing and criticizing stories which the girls will study and relate in class.

April 15

Miss Marjorie Greene, of the Boston School of Occupational Therapy, talked to the Homemaking girls about the training at that school. This was the first of a series of talks in regard to placements for graduates.

New circulars of the School and its activities have just arrived from the printers, and are now being distributed to all desiring information about the School.

Top Dress Pastures Early

April first is the date to top dress pastures for maximum growth and to provide the ten days' earlier pasturage that saves expensive farm feeding, according to Professor Ralph Donaldson of the M. A. C. Extension service.

Judge Louis Cox of Methuen is quite satisfied with the results of his pasture work last year. After paying for fertilizer, the milk cost per hundred weight in summer on pasture was fifty cents less than in winter. Or after expenses for pasture fertilization and feed, his herd gave him a profit of \$268.71 more in summer than it did in winter.

Method of Procedure

First: May 1 to June 1 is the period when farm feeding can be eliminated by applying 500 pounds of a 5-8-7 fertilizer (or 200 pounds of nitrophoska) per acre about April first. This should supply good grazing for four cows. Fence off this area from the rest of the pasture. Thirty pounds of nitrogen, of phosphorous, and of potash per acre are needed.

Second: During June keep cows out of fertilized area and graze in the unfertilized area.

Third: Use the fertilized pasture in July.

Fourth: July 15 to October: One method is to top dress meadows early; cut this hay early and graze the rowen. Never graze this mowing too heavily or too late in the fall.

Another method is to seed about May 1st, twenty pounds of white sweet clover to one bushel of oats. Five hundred pounds of 5-8-7 and two tons of hydrated lime per acre are necessary.

—F. C. Smith.

Safe Milk

The requirements for safe milk are: healthy cows, absolute cleanliness, and low temperature.

How to Produce Safe Milk

Keep healthy cows.

Keep the barn clean.

Keep the buildings free from contaminated surroundings.

Allow only healthy attendants to care for the cows and milk.

Always wash hands with soap and water before milking.

Milk with dry hands.

Cleanse the udder with a clean damp cloth before each milking.

Clean or groom the entire body of the cow daily.

Do not shake out or feed dry fodder just previous to milking.

If udder is infected reject the entire lot of milk from the cow until her condition has been established.

Use narrow top milking pail.

Strain each milking immediately remembering that straining does not remove bacteria.

Strain through sterilized cloth or filter.

Sterilize all equipment thoroughly. It kills any harmful bacteria that may be present.

Cool milk immediately to 50°F or lower.

If you have any doubt as to the condition of your milk it should be pasteurized before it is consumed.

—J. E. Eastwood.

Future Farmer Broadcasts

Through the courtesy of the National Broadcasting Company, a regular broadcasting time has been secured for the Future Farmers of America. Fifteen minute F. F. A. programs will be given during the Farm and Home Hour on the second Monday of each month. Dr. C. H. Lane opened the regular series of F. F. A. broadcasts on April 13th. He spoke on "What the F. F. A. Is and Does."

These national broadcasts will be given from three key stations: WRC, Washington, D. C.; WJZ, New York; and KYW, Chicago. Remember, the F. F. A. radio programs occur during the Farm Hour, 12:30 to 1:30 P. M. Eastern Standard Time, on the days previously mentioned. Tune in May 11th for the second broadcast.

Instructor Metcalf Representative at Annual Regional Conference

At the recent annual North Atlantic Regional Conference for the State Supervisors and Agricultural Teacher-Trainers, Mr. Stimson, Supervisor of Agricultural Education, selected three instructors whose accomplishments are outstanding, to contribute on the subject of project budgeting, accounting, and interpreting features of the program. Instructor E. E. Metcalf of this School was chosen from the northeastern section. The general principles discovered, or exemplified, in his field, are generally important in all fields of project teaching.

Package Bees Being Purchased

Bee keepers and fruit growers have ordered through the purchasing department of the State Farm Bureau forty-five five-pound packages of bees. These packages are large enough so that they can be used in the shipping package in the orchard. This is the second year that growers have used package bees with uniform success.

—G. A. Meigs.

Gymnasium Used as Community Center

The Essex County Agricultural School has had a very interesting series of group meetings in its gymnasium during the winter season. The School's policy has been to allow the use of the gymnasium to those groups in Danvers or Middleton who care to have, once a week, an evening's recreation. The boys of the Danvers Baptist Church with a group of boys ageing from ten to eighteen have used the gymnasium on Monday evenings. Mr. Creighton Goodale of the Tapleyville Methodist Church has taken charge of a younger group of children between the ages of five and ten on Tuesday evenings. On Wednesdays basketball sharks of the Tapleyville Men's club have enjoyed taking advantage of the showers, court, and some of the apparatus. The girls of the Tapleyville Methodist Church were successful in a series of basketball games held on Thursday evenings during the winter. Fridays have been reserved for those boys who, as student farm helpers, are required to stay on the School farm as members of Camp Bauer. They have played some of the local teams and generally made good records. Saturday evenings have been looked forward to by Rev. Ralph Webb of Middleton, who supervises the athletic games of his boys. The total number of persons using the gymnasium runs between one hundred and one hundred and fifty persons in the course of the week. As a general thing the groups start playing in October and continue through May.

—Philip Couching.

Garden Clubs Being Organized

Garden Clubs are being organized in many new communities as well as all the old throughout the county. More clubs are being organized this year than ever before, according to the report of the County Club Agent. Boys and girls are realizing that they can do something to help out the family budget. Many club members are able to make money on their gardens. Last year one girl in West Roxford gained one hundred and fifty-nine dollars at the end of the summer.

The young people over ten years of age are urged to join a club immediately. If there is no club in your community write to Horace J. Shute for information. The requirements for the Essex County 4-H garden project are 500 square feet of land. Plant and care for five different varieties of vegetables. —H. J. Shute.

Slip Cover Project

For the first time women of the county will be given an opportunity for making slip covers. Women will welcome this help as a means to protect furniture from dust and soil. Slip covers also add a decorative note to any room in which they may be used. Many unattractive chairs, sofas, and couches are hidden by the use of slip covers. Groups have been formed in the following communities: Cliftondale, Lynnfield Center, Middleton, Ipswich, Danvers, Beverly, Marblehead, Topsfield, Boxford, and Andover. Two representatives from these groups will meet Mrs. Harriet Haynes, Home Management Specialist, on Friday, April 24th, at the Essex County Agricultural School to receive instructions. They will then return to their groups and give back this information.

Timely Suggestions Given by a Specialist

Miss May E. Foley, State Nutrition Specialist, gave a most valuable lecture-demonstration at the Groveland Congregational Church on Wednesday, April 8. There were 92 women present, representing fifteen communities. The subject of Miss Foley's lecture was "Getting Our Money's Worth." She said: "To feed the family well, we must give every day those foods which will build bodies and keep them in good repair and good health. One quart of milk for every child, and a pint for every adult, three servings of vegetables, two fruits, and at least one serving of dark bread or dark breakfast cereal should be included. Eggs, fish, meat, cheese, or dried peas or beans should also be served daily. Eggs are particularly valuable, and are now inexpensive.

Expensive cuts of meat, cream, and fruits and vegetables out of season, cannot be used. Dried fruits may be used often.

If milk, tomatoes, and raw cabbage are used abundantly, and dark breads and breakfast cereals are used in place of the refined products, any diet will be improved and the cost may be kept down."

Use of Vegetables

Miss Foley also stressed the fact that the use of vegetables was a very definite means of cutting down the food budget. If vegetables are well prepared the family will like them. If given early in childhood, the habit will be acquired.

She said that as much should be spent for milk as for meat, and as much for fruits and vegetables as for meat. She demonstrated the making of baked onions, kidney bean chowder, macaroni fluff, salmon timbals with white sauce containing

peas and raw carrots, golden fruit salad, and Norwegian prune pudding.

Macaroni Fluff

- 2 cups of cooked macaroni
- 1 tablespoon melted butter
- 1 cup hot milk
- 1 cup strained tomato
- 1 cup grated cheese
- 1 tablespoon minced onion
- 1 tablespoon minced green or red pepper
- 3 eggs, beaten

Add cheese, butter, onion, pepper, to hot milk. Add cooked macaroni, tomato, and egg yolks. Fold in beaten egg whites. Grease baking dish; set in pan containing one inch of hot water. Slow oven for 45 minutes. One cup macaroni and one cup bread crumbs may be used.

—M. P. Crawford.

BETTER HOMES DAY
JUNE 10, 1931
ESSEX COUNTY AGRICULTURAL SCHOOL

Every member of the Extension family will wish to mark on the calendar Wednesday, June 10, for that is the one day of the year when the Extension family and their friends meet at the Essex County Agricultural School.

Two fine speakers have been engaged: Dr. James Gordon Gilkey of Springfield, and Professor E. Clark Thayer of Massachusetts Agricultural College.

Further announcements will be contained in the May issue.

—Marion P. Crawford.

Clothes Clinic-Style Trends

On Tuesday, March 24, under the auspices of the Extension Department, Mrs. Esther Cooley Page, State Clothing Specialist, demonstrated to eighty-five women from twenty-one communities, skillful methods of remodeling clothes which might otherwise be discarded because of passé styles. The morning was devoted entirely to pin fittings for women who had brought coats and dresses. Spring coats were transformed into wool dresses—and evening gowns were modelled from simple afternoon frocks. Mrs. Page was extremely efficient in advising methods for re-cutting or re-trimming clothing so as to entirely disguise any out-of-date lines. Her advice was thoroughly satisfactory.

~In the afternoon, Spring and Summer fabrics and colors were discussed and demonstrated with sample dresses and bits of materials. Colors are no longer chosen for blondes and brunettes, but rather for warm and cool types. A fact that was especially stressed by Mrs. Page was that

Flower Gardening Popular Unit Course

H. Linwood White and C. S. Wright, instructors in floriculture, have at this time reached the peak of their unit courses in flower gardening. A total of eighty-three garden-loving women from Swampscott, Wakefield, and Danvers are vastly interested in learning how to organize and apply their ideas of good taste with respect to the choice and artistic arrangement of plants and garden accessories within their home grounds. The course assists them, as well, in buying, propagating, growing, protecting and improving the plants so arranged.

Vegetable Outlook for 1931

The 1931 outlook offers little hope for less competition, for increased demand or for higher prices for local grown vegetables than in 1930.

To meet this situation with any expectation of a profitable season demands the most careful planning on the part of growers, based on their last year's experience.

Factors tending to increase possible profits include the following:

No increase in total acreage of vegetables for market.

Concentration of effort and expense on the best land available.

Low cost of production through high yields per acre and efficiency of labor and management.

Wise choice of the kind of crops to be grown, the number of plantings, and the size of each.

Avoiding waste by smaller but more frequent plantings that can be cleaned up while crop is still of good quality.

Increased emphasis on quality of product offered for sale.

Better grading and packing.

Re-enforce manure used by adding 40 to 50 lbs. of super-phosphate to each ton.

Increased use of green manure crops as a substitute for manure.

Production of green feed for dairy or poultry enterprise on a portion of the land usually devoted to vegetables for market.

More careful study of markets—getting as close as possible to the consumer.

—A. L. Dacy.

of having your wardrobe widely ranged in colors. Everyone today is perfectly safe in wearing *any* color so long as it is her particular shade.

As for the fabrics to be worn this year, cottons of all sorts are sure to be correct. Among those listed by Mrs. Page the most important were voiles of the sheerest quality, calico prints, dotted dimity, durené, and English lawns.

ESSEX FARMER AND HOMEMAKER

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VOL. 12

HATHORNE, MASS., MAY, 1931

No. 5

Camp Bauer

Camp Bauer, in its eighth season, is ever popular with students whose summer projects consist of farming on the School premises.

Even the farm boys who rise at 4:30 are eager for athletic activities at the end of the day. Campers are granted the use of the tennis court, and on Friday evenings, the School gymnasium, where basket-ball and wrestling add to their hardiness. Baseball has also proved a favorite sport, and in summer a swim in nearby "natural pools" takes first place.

Hours spent on rainy evenings in the camp recreation room reveal the campers' regard for each other's opinions. Ideas are interchanged — often to the rhythm of radio fantasies. A morning paper and magazines are supplied by the School, and the agricultural library offers literature of wide range. According to the camp counsellor, Fred Kezer, of Newburyport, tedious moments are scarce.

A camp of this sort, where the boys are actively employed in diverse branches, with enough sporting activity to be stimulating, has proved to develop an understanding of practical living and co-operation among comrades.

Valuable Co-operation

During the weeks of May 11 and 18, girls of the Homemaking Department, in groups of two, visited the Essex County Sanitarium, to observe and work with Mrs. Johnson, Head Housekeeper. All departments were considered, to instruct the girls in the intricacies of Institutional Management. The course will continue through the coming three weeks for additional groups.

The School is extremely grateful to Dr. Pettingill for enabling the girls to gain this practical knowledge of their classroom theory.

Should a County School Observe Arbor Day?

This question was answered at the Essex County Agricultural School in the affirmative, since there were two Arbor Day celebrations held. On Friday, April 24th, the students and staff of the Homemaking Department, under the guidance of Instructor Wright, planted an American Elm near the Homemaking Building. This work was accompanied by proper exercises.

On the following day, Arbor Day,



two trees were planted on the campus, north of the Agricultural Building. The participants of this event were the Administrative Staff of all departments. The trees planted in this case were Siberian Elms, which have become quite popular in horticultural circles recently. These trees were donated by the New York State Agricultural Experiment Station, at Geneva, New York. This species is noteworthy for its extreme hardiness, large size, beauty of leaves and general gracefulness.

The planting of specimen trees as above makes a splendid connecting link between the students, staff and the institution itself.

Happy Health Camp

For the first time in history, members of the Essex County 4-I Club will have a camp of their own, where they may enjoy a week's recreation from June 22d to the 27th, in Foxford.

Fittingly named, the Happy Health Camp will be directed by the County Club Agent, Horace J. Shute, with competent local leaders as counsellors.

Prospective campers must be club members, at least twelve years of age, who will submit a physical certificate signed by a family physician, and a written permission by the parents for swimming. It is hardly necessary to add that each camper will be a typical, bona fide 4-I member.

The daily program is so arranged that it provides education, recreation, and inspiration. The mornings will be devoted to "hobbies." Afternoons of sports including outdoor games and swimming — don't forget the swimming, boys and girls — will lead to early evening camp fire programs which will bring out the deeper and more significant side of club work.

The Happy Health Camp is especially designed for a mixed group of campers, with ideal sleeping and housing facilities for both boys and girls. Parents and friends are cordially invited to visit the camp, — especially in the evening, to enjoy the camp fire programs.

Parents' Day—June 16

Parents' Day! the day when Miss Anna A. Kloss is to be with us; and a day of exhibits, demonstrations, and music. Teachers of the Homemaking Department will be at home to the parents and friends of all the girls, who will act as hostesses with their instructors and Miss Ethel M. Moore, Educational Manager of the

(Continued on page 4)

**JUNIOR HIGH SCHOOL
FIELD DAY, MAY 23**

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

May 23—Junior High School Field Day.

June 10—Better Homes Day.

June 13—4-H Club Field Day.

June 16—Parents' Day.

June 19—Homemaking Department closes.

Aug. 4-7—Summer Conference of Agricultural Teachers under the auspices of the Massachusetts State Department of Education.

Aug. 5—Market Garden Field Day at the Field Station, Waltham.

Topics for Rural Schools

"The New Rural School is educating for rural life. It is not turning the dreams of ambitious youth to the city as the only challenge for worthy achievement. It finds great work to do on the farm and in the farm home and community, and is helping farm boys and girls there to do it well.

Upon the rural schools of today devolves a perplexing and challenging task. They must educate youth for the farm revolution in industry brought about by the machine. The principal aspect of this farm revolution is the substitution of co-operation for the defiant spirit of independence that the isolation of farm life has permitted to exist. Co-operation is the first and last principle of every activity of industry and business. Urban people have learned to work together on their enterprises. Farmers must learn to co-operate in crop production and in the distribution of their products. They must learn to work together to make rural life attractive."

CORRECTION—Please note that 4-H Club Field Day, which was erroneously scheduled in last month's edition for June 6, is not to take place until Saturday, June 13.

Attention Alumni

Plans have been made to canvass every alumni member for the purpose of (1) increasing membership in the alumni association; (2) creating greater interest in alumni activities; and (3) developing a service to alumni members which will meet with the approval of everyone.

The county has been divided into geographical sections, each of which is being canvassed by an association member. A special questionnaire has been drawn up which will be presented to each member. It is hoped that a complete picture of what each graduate is doing may be secured without delay.

Under present conditions it will be impossible to get in touch with every alumni unless unknown addresses are revealed. If any of the following are known, will alumni members be so kind as to send address to Horace J. Shute, Alumni Secretary, at the School:

Roland H. Berry ('29); Herman F. Herrick ('21); Ernest E. Howe, ('24); Roger H. Lewis ('25); Joseph C. Murphy ('25); Harold E. Nelson ('21); Ralph B. Odiorne ('23); Victor S. Poirier ('16); G. Eliott Prime ('16); John A. F. Wood ('21); Grace E. Bixby (Mrs. Fred Fenton) ('23); Esther L. Bryer (Mrs. Harold Milard) ('23); Ruth F. Burbeck (Mrs. Ernest B. Frey) ('16); Olga M. Carter ('24); Grace L. Colman ('27); Amy L. Fogarty ('20); Jesse F. Foster ('20); Linda B. Hoyt (Mrs. Wm. Todd) ('17); Evelyn A. Hudson ('29); Gertrude M. James ('24); Emily G. Jordan ('28); Evelyn M. Newhall ('24); Phelicia M. Pension (Mrs. Richard Murray) ('23); Marguerite M. Perkins (Mrs. Edward Armour) ('23); Director G. Rae Reid ('25); Helena E. Rice ('24); Sylvia Sharples (Mrs. John McGrath) ('29); Veneita Stillings (Mrs. Harold J. Coburn) ('22).

Third Term Honor Roll

It is with pride that the Educational Manager of the Agricultural Department announces an increase of 4.1 per cent over the number of last term's honor students, with fifty-two members having attained a scholastic average of B or better.

The first term's average was 22 per cent, with a drop of 4 per cent during the second term. This, however, was remedied and bettered during the last period, when a percentage of 25.7 was scored before the boys left for summer project work.

The Freshmen are to be especially commended for the greatest increase of all four classes.

News of the School at a Glance

April 22

Mrs. Marion Rudkin, versatile story teller of the Beverly Public Library, brought her course in the art of story-telling to a fitting conclusion with recitations both amusing and poetically beautiful, before students of the Homemaking Department. During the month of April, Mrs. Rudkin met the students three mornings weekly to instruct, and then to analyze for the girls their methods of presenting stories for children of pre-school age. It was an interesting course to follow, and an entirely constructive one.

May 5

Miss Helen O'Brien, of the Boston General Foods Corporation, spoke to the Homemaking girls on the subject of positions in the field of lecture-demonstration work in a home economics line.

May 6

Sixty-three boys from the Agricultural department of the Haverhill High School visited this School with their Agricultural Supervisor, Ernest A. Howard, a graduate of the School in the Class of '17.

Alumni Notes

Arthur Sevigny, '26, is operating a 35-acre farm of his own on River Road, West Andover. He and Mrs. Sevigny received congratulations at the birth of a daughter, Margaret Isabel, in February.

On April 18, Miss Avis Gray, of Beverly, became the bride of Earle Blake, '30, of Peabody.

News has reached us that Helen E. Flynn, '28, of Salem, was married during the winter, to Leon Pauling.

90% Clean Apple Club

Fruit growers of Essex County are determined to produce high quality fruit. Fifty-one fruit men in Essex County have signed up in the statewide campaign to produce apples 90% free from insects and blemishes.

Two demonstration orchards, owned by G. Richard Abbott of Andover and Melville Grey of Wenham, have been taken over by the Massachusetts State College. The purpose of using these demonstration orchards is to plan a management program that will produce apples substantially free from apple maggot. Professors Bourne and Thies recently made an inspection of these orchards and have planned a spray schedule especially suited to them.

Fourth Egg-laying Contest

The results of the egg-laying contest in the past two months show that the boys have been culling heavy and feeding only the laying hens.

This contest closes June first, and the winners in the two classes will be chosen, as well as the poultry delegate to the state camp at Amherst.

MARCH EGG-LAYING CONTEST.

Flocks with 25 birds or over.

		Eggs per	
	Birds	Eggs	Bird
1. Algerd Ramaika, Haverhill	38	914	24
2. Justin Little, Newbury	105	2500	23.7
3. Joseph McCarthy, Haverhill	27	633	23.4
4. Edmund Saulnier, Methuen	65	1509	23.2

Flocks with less than 25 birds and over 10

1. Joseph Brain, Methuen	12	291	24.2
2. Henry Burnhard, Methuen	17	396	23.3
3. Wendell Stackpole, Bradford	16	370	23.1

APRIL EGG-LAYING CONTEST

Flocks with 25 birds or over

1. Justin Little, Newbury	97	2372	24.4
2. Alexander Maskiewicz, Newbury	175	4315	24.6
3. Joseph McCarthy, Haverhill	27	650	24.07
4. Algerd Romaika, Haverhill	35	840	24

Flocks with less than 25 birds and over 10

1. Peter Woidyla, Haverhill	10	250	25
2. Wendell Stackpole, Haverhill	14	343	24.7
3. Bennie Chapinski, Haverhill	13	288	22.1

Dairymen's Association Incorporated

On Tuesday, April 28, the Essex County Dairymen's Association incorporated as an organization under the co-operative laws of the Commonwealth. Mr. Dan Curran, counsel for the State Department of Agriculture, presented suggested by-laws, which were adopted.

Following is the board of directors: President, Harvey Turner, Andover; Vice-President, Miss Jane Shattuck, Topsfield; Edward Wigglesworth, Topsfield; Silas Little, Newbury; R. J. MacKenzie, Ipswich; R. A. Messerli, North Andover; Clerk, F. C. Smith, Danvers; Treasurer, Mrs. Mary Flint, West Andover.

Vaccinate Your Pullets

Vaccine for fowl-pox may be procured from the Farm Bureau, 657 Main St., Waltham, Mass., at about one cent per bird.

The Extension Service is advising all poultrymen to vaccinate their pullets at least one month before putting them into laying quarters. This is an excellent insurance against a fall or winter drop in production.

The next issue will contain an article on "Who Should Vaccinate" and "Methods of Vaccination."

**The 1931
FARM AND HOME WEEK
at
Massachusetts State
College, Amherst
is scheduled for
JULY 28-29-30-31**

Brom-Cresol Test

A group of dairymen, directors of the newly-organized Essex County Dairymen's Association Incorporated, have drawn up plans for producing and selling a high class, locally produced milk. They adopted the Grade A Massachusetts milk, but added the following requirements: 4 per cent butter fat from tuberculin-tested cows; not to exceed 100,000 bacteria per cubic centimeter.

In order to make this milk safe without any question of doubt, it is suggested that dairymen procure the necessary equipment and test their herd milk for bacteria which might cause disease in human beings, such as, septic sore throat, typhoid, scarlet fever, etc.

The Test

In using this test to determine the condition of the cow's udder, the following facts must be borne in mind:

1. Normal cow's milk is acid.
2. Abnormal udders produce milk that is alkaline.
3. Brom-cresol purple is a chemical indicator of either an acid or alkaline condition depending on color reaction.

To make the test, place three cubic centimeters of milk in a glass test tube. Use a pipette for this purpose and then add one or two drops of Brom-cresol purple. Shake together and allow to stand; then hold the test tube up to the light. If the milk shows a light gray it is perfectly safe. If dark blue or purple it indicates abnormal or diseased udder, signifying some form of bacteria which might cause danger to human beings.

The next step then is to test milk from each cow, and when such a cow is found producing abnormal milk, she should be removed from the herd until the udder condition becomes corrected.

Brom-cresol may be procured from E. F. Mahady Company 851 Boylston Street, Boston.
—F. E. Smith.

Weather Summary — January to May, 1931

	Jan.	Feb.	Mar.	Apr.
Maximum temperature	48	46	53	77
Minimum temperature	1	—4	20	29
Mean daily temperature	26.4	26.8	36.3	47.6
Five-year average '26-'30)	26.7	26.9	35.3	43.7
Greatest daily range	29°	35°	25°	37°
Least daily range	8°	3°	3°	6°
Precipitation	3.49"	3.16"	4.73"	3.18"
Five-year average ('26-'30)	2.55"	3.66"	2.34"	3.51"
Total to date	..	..	..	14.56"
Five-year average ('26-'30)	..	..	..	12.06"
Excess to date	..	..	..	2.50"
Number days rain fell	5	9	12	10
Average relative humidity, 8 A. M. ..	73.6%	79.9%	74.1%	60.1%
Number clear days	13	11	9	14
Number partly cloudy days	11	6	9	9
Number cloudy days	7	11	13	7
Total hours sunshine	174.5	143.0	163.0	230.5
Per cent sunshine	59.5	48.5	44.2	57.5
Snowfall	13.5"	12.5"	9.5"	3.0"
Total to date	..	..	..	38.5"
Five-year average ('26-'30)	..	..	..	28.3"

The winter proved to be of ordinary intensity, neither very mild nor severe as compared with the previous five years. A noticeable feature of interest was the lack of extremely low or unusually warm days. The lack of a warm spell was especially noticeable during March.

Rainfall figures have up to normal or a bit above so far, and much in excess of last year at the time to May 1, 1930—9.16").

Sunshine for the year to date is almost exactly the same as one year ago, but is a little behind the five-year average.

Slip Cover Project

Mrs. Harriet J. Haynes, State Extension Specialist in Home Management, of Massachusetts State College, gave a lecture-demonstration on the use and making of slip covers, on Friday, April 24, at the Essex County Agricultural School. Group leaders from eleven nearby communities were represented. The Slip Cover project will be carried on by these leaders at intervals during the coming few weeks in May to over 150 women.

Mrs. Haynes explained the uses of slip covers from a protective and decorative point of view. The materials should be chosen according to the rooms in which they are to be used; and if patterned, should be picked out discriminatively with a proportionate scale of furniture and room in mind.

Methods of measurements and means of dressing-up slip covers by adding ruffles were described in full by Mrs. Haynes. Interesting details, including ways of finishing off seams with piping, binding, or cording, add a finesse to the slip cover which might otherwise look unnecessarily plain.

At the close of Mrs. Haynes' lecture, patterns and sample covers were made for miniature chairs and davenport by each leader, to be later demonstrated to community groups.

Advisory Council Holds Annual Business Meeting

On Tuesday, May 19, the Seventh Annual-Business Meeting of the Women's Advisory Council, Community Committees, and Project Leaders of the County Home Economic Extension Service, was held. The purpose of the meeting was to review the accomplishments of the past year and to discuss methods whereby a larger and finer service may be performed for the coming year.

During the morning, questions pertaining to a more efficient and more helpful Extension Service were informally discussed. In the afternoon a playlet entitled "A Mother's Study Group in Child Development," was presented by the Cliftondale women, and slides displaying "A Trip to Banana Land" were shown by W. M. Leonard, a representative for the United Fruit Company.

About seventy women were present, representing twenty-five communities. The following members of the advisory council acted as hostesses: Mrs. Earl Bessom, Marblehead; Mrs. John Goodhue, Ipswich; Mrs. Harold Knapp, Newbury; Mrs. E. Robert Little, Boxford; Mrs. George Mitchell, Groveland; Miss Marion Parker, Beverly; Mrs. H. K. Richardson, Middleton; Mrs. Franklin Robblee, Salisbury; and Mrs. C. S. Wright, Danvers.

BETTER HOMES DAY

Wednesday, June 10

... AT ...

**Essex County
Agricultural School
HATHORNE**

Better Homes Day

Again the women who have been in Extension classes during the past year, together with their friends, will meet at the Essex County Agricultural School for the annual Better Homes Day meeting. The program will start at 10 A. M., on Wednesday, June 10. We have been fortunate in securing for one of our speakers, Rev. James Gordon Gilkey, of the South Congregational Church of Springfield. His subject will be "Keeping Enthusiastic About One's Work." Those who have heard Dr. Gilkey over the radio will welcome the opportunity to hear and meet him personally. Dr. Gilkey's talks are full of interest, enthusiasm, and humor.

During the morning we shall have for our speaker, Professor E. Clark Thayer, of Massachusetts State College. He will talk on "Flowers and Their Arrangement in the Home." For several summers Professor Thayer has given this talk to interested audiences during Farm and Home Week at Amherst.

Miss Mary Pozzi, assistant Home Demonstration Leader, will give suggestions for recreational diversions and conduct community singings.

There will be, as usual, exhibits showing the type of work the Extension Department has been conducting during the past year. These exhibits will include A Model Kitchen, The Child at Play, The School Lunch Box, and Home Nursing. Community chairmen will act as hostesses. All women of the county are cordially invited to attend. Mothers are invited to bring children, who will be cared for by students of the Homemaking Department. *M. P. Crawford.*

(Continued from page 1)

Homemaking Department.

Miss Kloss, an authority on vocational education and its development, will have a message of particular interest to parents who are in sympathy with their daughters' work in Homemaking courses.

The students are already preparing an entertaining program, including vocal and instrumental selections, and a fashion display entitled "A Costume Alphabet."

Remember, this is the day when box lunches are relished about noon.

A Spring Tonic

If you have that tired-out feeling which often comes in the Spring, perhaps you need a few extra vitamins and minerals. You can get these from dandelions and other wild greens, cabbage, spinach, milk, eggs, rhubarb, oranges, and tomatoes. All fruits and vegetables are valuable, especially the raw ones. In cooking vegetables, if very little water is used and the juice served, no minerals will be lost. Cooking for a short time without stirring helps to reduce the vitamin loss. Luckily, canned tomatoes are practically as good a source of vitamins as the raw ones, because the acid prevents loss of vitamins. When they are reheated, care should be taken to cool for a short time only, and stir as little as possible.

A very excellent bulletin, "Get the Tomato Habit," is now being prepared at the Massachusetts State College, and will soon be ready for distribution. You may secure a copy free from the College, or from your home demonstration agent.

Tomato Surprise

- 1 pint canned or cooked tomato
- 2 large onions
- 1 diced green pepper
- 1 cup diced celery, coarse stalks and leaves may be used
- 2 tablespoons flour
- ½ cup grated cheese
- Butter, salt and sugar
- 8 slices bacon

Dice onions and cook for 10 minutes in small amount of water. Add pepper, celery, tomatoes and seasonings, and cook 15 minutes with little or no stirring. Thicken with flour and pour over whole-wheat toast. Sprinkle with cheese and garnish with broiled bacon. This makes an excellent supper or luncheon dish.

Milk Consumption and the Growth of School Children

"Under the auspices of the Department of Health for Scotland, 10,000 children in the Lanarkshire schools were given three-fourths pint of raw or pasteurized milk every day from February to June, 1930, and compared with 10,000 other children not so favored.

"The result, as is similar but less extensive tests in previous years, shows a definite increase in the rate of growth of the milk-fed group. This increase was the same for raw and pasteurized milk. There was no obvious difference between boys and girls, and little evidence of definite relation between the age of the children and the amount of improvement."—*American Journal of Public Health.*

ESSEX FARMER AND HOMEMAKER

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VOL. 12

RATHORNE, MASS., JUNE, 1931

No. 6

Foundation Plantings

Periodic studies in the past few years of more than a hundred gardens belonging to our adult Unit Course students, have included a critical examination of the foundation plantings about their homes. Some satisfactory plantings have been recorded, and others have been markedly improved after their weaknesses were understood by the owners.

The most frequent fault of the plantings studied was their meagerness. The garden was thought of as a thing apart from the house, and little or no attempt was made to connect them by a border of shrubs or evergreens, or to interrupt or conceal the harsh sharp lines of sill and corner trim. In a very few cases observed there was too continuous a banking of shrubs, so as to create the impression of a house resting on a billowy bed of green. More or fewer shrubs or a re-spacing were recommended in the above instances.

Most foundation plantings failed to fulfill the main purpose for which such plantings are made. This is to broaden the apparent base of the house. Too often shrubs were planted along the front and sides, and nothing at all on the corners. It is at the corners and in the angles of the steps that the tallest and heaviest plantings can be most effectively made. Tall plantings shorten the vertical corner lines, and heavy plantings lengthen the horizontal base lines of the house. Such plantings are especially important about tall houses on elevated ground or with high foundations. Between the corner and entrance groupings of shrubs, lower shrubs or possibly only herbaceous perennials are commonly sufficient and most appropriate.

Another common error noted was to plant shrubs about the foundations in a single straight line instead of staggered or in clumps. When Spirea

Van Houtte or the summer blooming Hydrangea (Hydrangea arborescens) or some other shrub was chosen as the sole variety to be planted, and these were made to stand in single file, the results were contrary to good foundation usage. Be it added, however, that in restricted areas a low-clipped hedge along the base lines is often likely to prove most satisfactory.

Summer is the fitting time to observe plantings at home and abroad, and we may profit much by our observations.

J. LINWOOD WHITE.



Early Fruitfulness

The apple tree in the picture was set out in the spring of 1930, having been propagated in and moved from our own nursery. In the fruit testing project many of the new fruits are now bearing their first crop. May we repeat that all citizens interested in fruits for either their ornamental or fruit values are very welcome to inspect this planting at all times.

One of the outstanding varieties this year is a new sweet cherry called Seneca, a product of the New York State Experiment Station of Geneva. The outstanding points for recommendation are early fruitfulness and ripening, being fully ripe June 15, ten days earlier than any previous sorts; and also the beautiful color and high quality of the fruit.

Thin Your Apples

Certain orchard tasks may be more inspiring than climbing a ladder to pick off little green apples, but few are more profitable. At harvest time the average grower picks his culls along with his good fruit, sorts them out, and then throws them away. Better to throw them away in July, when time is not quite so valuable.

Please note how thinning your apples in July will put dollars into your pockets:

First—It improves color and quality.
Second—It increases size.

Third—It reduces the number of culls.

Fourth—It preserves tree vigor.

Fifth—It prevents breakage.

Sixth—It decreases the labor of harvesting.

Improvement in color comes from exposing a larger number of individual apples to light. Quality, closely associated with color, comes from materials manufactured in the leaves. If each apple has a normal number of leaves (40 to 50) from which to draw its supply of carbohydrates, it is likely to develop normal quality.

Increase in size comes as a natural consequence of allowing more leaves per apple. The markets generally pay a premium of about 25 cents per bushel per quarter-inch increase in size. In a year of heavy "set," thinning can be relied upon to bring about an average of at least that much.

Thinning eliminates the majority of apples blemished by insects or disease, thereby trading culls for perfect specimens. Careful thinning during July is a big factor in meeting the requirements of the "90% Clean Apple Club."

Eliminating all of the surplus fruits, which often means removing two-thirds of them, relieves the tree of the extra burden entailed in growing a heavy crop of seeds, and leaves

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Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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CALENDAR

June 26—Free canning demonstration by Professor Cole of Massachusetts State College, in the Home-making School.

July 15—Project tour under the auspices of the Young Farmers' Association.

Aug. 4-7—Summer conference.

Aug. 14—Final demonstration by Professor Cole.

Sept. 9-12—Topsfield Fair.

Summer Conference

The annual summer conference of Directors and Inspectors in Massachusetts vocational agricultural schools and departments will be held at Hathorne, August 4-7 inclusive. At this time Director Smith and his staff, with H. T. Wheeler, Instructor in charge of the agricultural department at the Reading High School, will be hosts to a large group of educators who have charge of agricultural education in this and other nearby states.

The conference will open on Tuesday, August 4, at 9 A. M., and the first day will be spent in visiting student projects and graduate enterprises along the North Shore. The program includes the annual banquet and business meeting of the Massachusetts Vocational Teachers' Association. During the week optional trips will be offered to those interested in Dairying, Vegetable Gardening, Poultry Raising, Horticulture, and Marketing.

Project Tour

Announcement is being made of the second annual project tour to be conducted on Wednesday, July 15, under the auspices of the Young Farmers' Association. Further details concerning the itinerary will be sent out later in letters.

Alumni Notes

The engagement of Doris Tinkham, class of '21, to Robert C. Hall of Andover, N. H., was announced on May 26. It is understood that they are to be married very soon.

Word has been received that Bernice Whittier, class of '22, is in the Training School for Attendant Nurses conducted by the Household Nursing Association, Boston.

Friends of Alexander MacDonald, class of 1920, and President of the Alumni Association, will rejoice to learn of his plans to wed Miss Alice Patch of York, Maine, on July 12, at York Village. After a two month's trip, Mr. and Mrs. MacDonald will reside in Lawrence, where Mr. MacDonald is manager of the Swan and Berndtson florists' concern, located at 348 Jackson street.

The Cause of Dead Branches on Evergreens

Many inquiries have come to the attention of the Extension Forester this year to diagnose the cause of the so-called rust on pines, spruce and arbor vitae. It is not rust or any disease, but rather the result of the drought of last year and during the winter.

Tree roots were unable to supply the leaves with sufficient water to take the place of that lost in transpiration through the needles, and the tender ends of the branches withered and died.

Another condition noted by the Extension Forester was that one side of a great many pine trees appeared to have been blasted by flames from a fire. This was caused by high winds blowing when the roots of the trees were still dormant and unable to properly function. All moisture was withdrawn from the limbs and they consequently dried up.

If your trees are either wild or planted, Nature will soon cover up the rusty spots. The dead needles will fall, new growth will take their places, and only a few ends of the dead twigs will show. A blasted tree will be longer in recovering, but already the new green growth has changed the appearance of a great many trees.

The arbor vitae and other planted stock that suffered will either have to be removed entirely or those dead branches pruned off. This treatment will be left entirely to the judgment of the owner.

In order that this condition may not arise again, it is recommended that the ornamental plantings be covered with pine boughs, straw, burlap, or some similar protection from the winds of ensuing winters.

News of the School at a Glance

May 23

Junior High School Field Day had its most enthusiastic response in this, its fifth year, in spite of rainy weather. Over five hundred grammar and junior high school students were entertained at the school with indoor games, contests, music, moving pictures and readings by Mrs. Marion Rudkin of Beverly.

May 26

Mr. S. Gilbert Emilio, of the Peabody Museum in Salem, conducted a bird tour for the homemaking students of the Junior Science Division, spying out and describing birds which are rare and common to this part of Massachusetts. Swamp, meadow, and orchard birds were all classified by Mr. Emilio.

May 27

A large yellow bus carried upper-classmen of the homemaking school to Boston on May 27th, where the girls visited places of interest in connection with their classroom courses. The market district was the first visited, with stops at the Berry-Wales Meat Company, Faneuil Hall, and the Quincy Market. A thorough investigation of Filene's store, from roof to boiler-room, included the business offices, alteration rooms, French shop, employees' library and restaurant, and the kitchen and store restaurant where a special luncheon was served. At the "Clothes Institute" the girls heard one of the regular lectures on Color Harmony. The day ended with a complete inspection of Paine's furniture store, and the large yellow bus retraced its way back to the School.

June 10

The women's section of the County Extension Service had an exceptionally successful meeting in its eighth annual Better Homes Day, held at the School. Speakers of extreme interest and fame were secured, and the note of congenial service, typical of the extension department, was prevalent.

June 13

The 4-H Clubs of Essex County chose one of the rarer days in June when the sun was shining, for their Field Day. Finals in the dress, health, and music appreciation contests were featured, and judging and identification contests were entered with enthusiasm, as were athletic competitions in the afternoon.

June 16

Inclemency of the weather did not prevent a large attendance at Parents' Day, under the supervision of Miss Moore, educational manager of the homemaking department. Two hundred parents and friends of the students gathered to hear Miss Kloss

(Continued on page 3, col. 1)

Vaccination of Poultry in Essex County

The year 1929 saw the vaccination of poultry on a commercial basis as more or less of an experiment, and the success of that year justified the much wider usage of the protection in 1930. The general satisfaction that has resulted after two years of trial, indicates that vaccination will be universal in Massachusetts, and particularly in Essex County in 1931.

Previous technique in vaccinating called for the stripping of a few feathers on the hock or thigh of a bird, and the rubbing of a small amount of vaccine into three or four feather follicles with a stiff brush. A new method was developed in time, however, and this method permitted greater speed and required only about one-fourth as much material as the other procedure. This method, commonly known as the "stick" method, requires a surgeon's knife with detachable blades, which are inexpensive. Adhesive tape is wrapped around the blade, so that only 1/8-inch of the point is exposed. The point is dipped in the vaccine, part of which adheres to the tape-guard as well as to the blade. The point is then thrust into the thigh at a place about midway between the hock and the hip-joint, where a natural part in the feather occurs. The contact of the vaccine-saturated guard with the edge of the wound gives extra assurance of inoculation.

Value of Vaccination

A survey of poultry farms in the county in the fall of 1930 has shown general satisfaction with the results of vaccination, not only through freedom from fowl pox, but also from absence of colds reported in many cases. Of the few commercial poultrymen who have not considered it necessary to vaccinate in the past, either because of freedom from disease or because of very mild attacks, there has been indicated to the writer the intention to vaccinate this coming season of 1931.

The experience of poultrymen in Essex County indicates that the following measures are advisable:

1. Vaccinate all birds that are to be carried through the winter, unless they have been vaccinated previously. (One vaccination gives lifetime immunity.)

2. Vaccinate only those birds that are in good physical condition.

(Continued from page 2, col. 3)

lecture on Vocational Opportunities for Homemaking Graduates, and to study informally the displays of clothing, foods, health, science, and handicraft exhibits.

3. Vaccinate preferably on range in the summer at four or five months of age—about a month before birds come into production. Do all birds within a few days of each other when possible.

4. Segregate unvaccinated birds that are to go to market from those that are vaccinated.

5. Buy vaccine through the Massachusetts Farm Bureau or some similar reliable service, and follow the manufacturer's directions closely in regard to the care and mixing of vaccine, and to the disposal of any left-over material.

6. For greatest economy and speed use the "stick" method of vaccination.

J. STANLEY BENNETT.

Cattle Testing to be Continued

Towns which have petitioned the Division of Animal Industry for a complete test of all their cattle for bovine tuberculosis, will have the preference over general new testing work the remainder of this year, according to an announcement of Evan F. Richardson, Director of the Division of Animal Industry. There are 34 such towns waiting to have the remainder of their cattle tested. In all of them 85% or more of the cattle have either been tested or have been already signed up for a test.

All new testing stopped April 1, due to the fact that federal funds for reimbursement were exhausted and that any farmer who had his herd tested could receive only state money. The situation is now changed, as federal money will be available July 1. New testing will start the last week in June.

In the period when no testing was done the applications for tests were so numerous it was impossible to meet them all.

It has been the judgment of the council that what money was available would do more good if it were applied to those towns where the testing was practically complete. Except in certain cases where a farmer or group of farmers would be unable to continue to sell their milk unless their herds were tested, all the new testing will be confined to the towns which have filed petitions.

A new bulletin, No. 272, on Experiments With Hedges, by Frank A. Waugh, professor of landscape architecture at Massachusetts State College, is now published. Copies will be sent by F. C. Smith, County Agricultural Agent, Hathorne, or by the Agricultural Experiment Station, Amherst, on request.

New Safety in Roadside Stands

The State Department of Agriculture has put into operation a plan which is tending to curb the evils of the present manner in which farm produce is sold at roadside stands. The plan works out to the benefit of the farmers, also to that of the motorists patronizing these stands. About 40 of these roadside markets in the state are identified by a characteristic sign, easy to recognize.

Each sign is an assurance that the particular roadside market has been inspected and approved by the State Department of Agriculture and that all the products sold are of standard quality.

The regulations require that the produce offered for sale shall have been raised in Massachusetts and that the bulk of it comes from nearby farms or from the farm of the stand owner.

Through an arrangement made with the Massachusetts Farm Bureau Federation these signs are leased to the stand owners and can be taken away from anyone who fails to live up to the requirements. The Farm Bureau leases signs only to such stands as have been inspected and approved by the Department of Agriculture and will take away the signs promptly at any time the Department withdraws its approval.

Dr. A. W. Gilbert, State Commissioner of Agriculture, expressed himself as well pleased at the reception the farmers have given the plan.

(Continued from page 1, col. 3.)

it in better condition to produce a crop the following season.

The crop of apples on a thinned tree will weigh practically as many pounds and fill as many bushel baskets as if left unthinned, but the thinned crop is better distributed and therefore the tree is not as likely to break down under the load.

The cost of harvesting the crop is reduced by thinning, because it takes about twice as long to pick a bushel of 2½-inch apples as it does to pick the same amount of 3-inch apples.

In conclusion, not all varieties require thinning. Rhode Island Greening, Gravenstein, and to some extent McIntosh, will size up fairly well without thinning, unless the "set" is very heavy. There is, however, an advantage in breaking up "doubles"—that is, leaving only one apple on a spur. One of the varieties most likely to require thinning is Wealthy. Practically every Wealthy tree in Massachusetts should be thinned thoroughly soon after the June drop is over.

This article is based on advice given by W. H. THEIS, Extension Professor of Pomology.

Coming Events—Canning Demonstration

William R. Cole, Professor of Horticultural Manufactures at Massachusetts State College, has been engaged to conduct three meetings on Food Preservation at the Essex County Agricultural School under the supervision of the County Extension Department. The lectures will start promptly at 2 P. M. in the homemaking building on the following Fridays: June 26, July 17, and August 14. The canning of fruit and vegetables, with the making of jams and jellies will be demonstrated. Professor Cole is outstanding in this line of work. All homemakers interested are cordially invited to attend.

Professor Cole says: "I believe that the economic need for food preservation is as great or greater than it was when we were 'winning the war.'"

Can or Buy—Which?

Many people are asking this question: Shall I can, or shall I buy the canned product? Perhaps this question cannot be answered in arbitrary terms. All that can be hoped is to indicate some of the advantages of canning as opposed to buying.

First, a word or two with regard to the academic reasons for canning versus buying. The family with 50 pint jars of canned tomatoes of their own production in the storeroom will probably eat 50 pint jars of tomatoes during the winter season. Perhaps the family is of the size which should in proper dietetics use 60 pints of string beans in a season when the fresh supply is not available. If these 60 cans are in the storeroom they will probably be eaten, but if it is necessary to buy them the family might suffer by not having them at all.

Perhaps you have read or heard that the home-canned vegetables are less valuable in their vitamin content than is the case with the commercially canned. This would probably be true if home canning were done by the open kettle method. It certainly is not true if home canning is done by the can-cooked method, wherein the products are placed in the jars and the heat is applied after the jar is covered. Home-canned materials turned out by the can-cooked method are equally high in vitamin content with similar materials from commercial canneries.

Examples from an economic point of view may be discussed by the "case plan." For instance: one bushel (60 pounds) of fresh, ripe tomatoes can be bought for 60 cents to \$1.00. They produce 30 or more pint jars. It requires 1 hour of gas or 1½ hours

of oil to heat the water for blanching and for filling the jars. It requires 1½ hours of gas or 2 hours of oil to heat the water for processing and to do the processing if handling 12 to 15 pint jars per processing load.

Tabulating the above:

Tomatoes	\$.60	\$ 1.00
Blanch	.10	.15
Process	.13	.22

	\$.83	\$ 1.37
Cost per jar	.027	.0442

Roughly the cost would be 3 to 5 cents per pint jar for tomatoes and heat.

The jars will cost about 90 cents to \$1.10 per dozen, or 9 cents each. This item cannot be charged to a single year. Many records show a household equipment. That is, the supply of jars will be completely replaced every 10 years. Hence the yearly charge should be 1 cent per jar.

Jar rings cost about 10 cents per dozen for good ones; often three dozen for 25 cents; but a charge of 1 cent per jar can be put in here.

To recapitulate the economic costs we have:

Tomatoes and heat	\$.03	\$.05
Jars	.01	.01
Rubbers	.01	.01

\$.05 \$.07

Labor need not be considered—the housewife will work anyway, but it may be figured into the problem. It requires two hours time of an active worker to wash, blanch, peel, trim and cut the bushel of tomatoes. At 50 cents per hour this is \$1.00, or an additional 4 cents per jar for the tomatoes, thus making the final figure, 9 cents to 11 cents per pint jar. Canned tomatoes of equal quality retail at 14 to 17 cents.

The above is on purchased tomatoes. If grown the material cost will be lower than quoted.

Recipes on Request

In compliance with several requests, the recipes below are being printed.

Sardine Canapes

Cut slice of bacon in fourths. Wrap sardine in bacon and fasten with a toothpick. Broil until bacon is brown or cook on rack in pan in hot oven. Carefully remove toothpick and place sardine on small piece of toast cut in attractive shape. Serve with olives or pickles or celery stuffed with cheese as an appetizer. Olives may be served similarly. It is perfectly correct to eat this type of canape in the fingers.

Ham

Buy boneless hams which serve so much more easily. Freshen in cold water an hour. Cover with boiling

water to which has been added 1 cup brown sugar, 1 cup vinegar, and ½ cup mustard per ham. Boil gently until tender.

Gelatin Salad

- 1 pkg. lemon Jello
- 1 pt. boiling water
- 1 tablespoon vinegar
- ½ teaspoon salt
- 1 cup shredded cabbage
- 1 cup diced celery
- ½ green pepper cut fine
- ½ cup shredded carrot
- ½ cup shredded pineapple

Dissolve Jello in boiling water and add vinegar and salt. When this begins to stiffen, add vegetables and mold. Any desired combinations of raw or cooked vegetables or fruits may be used. Part fruit juice may be substituted for water.

Orange Nut Delicious

- ¼ lb. marshmallows cut in small pieces with scissors
- 2 tablespoons orange juice
- ¼ lb. peanut brittle, ground with fine cutter
- ½ teaspoon grated orange rind
- 2 tablespoons powdered sugar
- ½ teaspoon vanilla
- 1 pt. heavy cream whipped
- Mix ingredients and fold into whipped cream.

A Profitable Summer for Boys and Girls

The Children's and Youths' Department of the Topsfield Fair offers an incentive to the young people of Essex County who are anxious to make the summer profitable.

Wouldn't it be interesting to raise vegetables or poultry; to can fruits and vegetables; or make your summer clothing? It would help immensely with the family budget, and incidentally there is to be an opportunity to exhibit vegetables, poultry, canned goods, and clothing at the Topsfield Fair. Prizes are to be offered for the best exhibit in each class. Start now to decrease family expenses and make plans for entering the Fair exhibits.

Information and entry blanks may be secured from R. H. Gaskell, Secretary of the Topsfield Fair, Topsfield, Mass.

Dates for this year's Fair are September 9, 10, 11, 12.

J. E. EASTWOOD.

Ques. What effect has aluminum on vegetables?

Ans. Aluminum has no harmful effect on vegetables. Aluminum is one of the important constituents of the body, and if tiny particles should by any chance get into the food during cooking, it is easily seen that no harm is done.

CONFERENCE NUMBER

ESSEX FARMER AND HOMEMAKER

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HATHORNE, MASS., JULY, 1931

No. 7

New Development in 4-H Club Work

A new interest in 4-H club work was aroused during the week of June 21 when the County Club Agent, Horace J. Shute, with his local leaders, supervised a 4-H camp. Forty members, ranging in ages from twelve to seventeen turned campers on the site of the Happy Health Camp in Boxford. Well apportioned grounds owned by the Anti-Tuberculosis League of Lawrence, with a pond for boating and swimming just a leap and a bound away, composed the camp facilities.

A camp routine not unlike that of any summer camp was undertaken, with flag-raising and breakfast following closely on 6:30 reveillé. Dormitories were neatly prepared for inspection to make way for arts and crafts. State and County leaders with faculty members of the Essex County Agricultural School assisted in crafts and swimming instruction. Swimming was unquestionably the favorite sport and came appropriately just before dinner. Sports, hikes and nature walks followed rest hour, and another swim preceded supper. Most impressive of the daily events was that of the evening 4-H camp-fire service. On the last night of camp parents and friends of the campers were invited to attend this service. It was conducted by the assistant state club leader, Carl Nodine, and Miss Marion Forbes. Miss Forbes related the tale of how fire first served man, in bringing warmth to his home. Thus does the 4-H club's symbol of fire represent Service.

In the candlelight service which followed Miss Forbes' story the boy and girl who had most significantly represented 4-H ideals during camp week, were chosen as spirits of the camp. These were Eleanor Buckley of West Newbury and Walter Eldridge of Georgetown. Their candles were lighted by Mr. Nodine, who brought the spirit of Bristol to Essex County. The boys and girls best typifying 4-H's were then chosen. Mary Di Donato of Beverly represented head H; Lloyd Caskery of Newburyport the hand H; Clifford Nelson, Methuen, the heart H; and Esther Usher of Danvers the health H. The service closed with songs and "Taps."

The success of the camp was so entire, that anticipations for another week next year have already been expressed.



SWIMMING AT 4-H CLUB CAMP

The Summer Conference

The writer distinctly remembers attending his first Vocational Agricultural Teachers' Conference in 1914. In those days conferences were very different from the conferences of the later years. In fact there were two annual conferences, the winter conference at the Massachusetts Agricultural College and the summer conference at some point in the field. Many of the suggestions considered in those days and methods which were proposed by the Department of Education and by the members of the conferences have been now crystallized and adopted as good practices in this type of education.

It is with great interest that we note the increase and change in the size of the conference. In those days with speakers, teachers, and all parties concerned 25 was a good-sized conference, and now our meetings often range from 60 to 70 and even more.

One of the cardinal events which has persisted through the years has been the extreme interest and enthusiasm for the visiting of projects. This has been made doubly interesting since we now have an opportunity to visit the "grown-up" projects of graduates of more than 10 or 12 years' standing. Indeed, it is a noticeable fact as the conference swings around the State that much of the agriculture is now in the hands of those who have trained and graduated under this type of education. Undoubtedly this will continue to be more and more outstanding in the years to come.

(Continued on p. 2, col. 2)

A Satisfactory Garden

Does your garden please you? If the answer is "Yes" let's say it is a satisfactory garden. It may not be perfect in the eyes of many and it has not reached your ideal but it is a place you like to work in and therefore it is satisfactory. Many people strive to have a pleasing garden. They observe other gardens, selecting those arrangements which seem best, read about gardens, purchase and plant seed or plants, transplant, divide, exchange—and find happiness.

Above all, these people enjoy handling with their own hands the soil, the plants and flowers on their own plots of land—and what greater joy can there be than selecting choice blooms for this or that container which will brighten dim corners in a home?

Seeking further knowledge these gardeners go to garden lectures. A speaker may have given special prominence to a certain factor in planting, stressing the fact that one particular method was the correct method, but neglecting to add "in my opinion." I often wonder if we should attempt to say that our way is right—the rest, wrong—especially in flower gardening.

The discussions in these groups often run like this:

"All that hard work I did this morning was wrong. My little rock garden is wrong. I planted my roses wrong, trimmed my boxwood in the wrong way, and fed those plant lice the wrong thing." 'T'p go both hands in despair and the garden ceases to

(Continued on p. 3, col. 1)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FEE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.
Entered as second-class matter, May 23, 1919, at the post office at Hathorne, Mass. under the Act of August 24, 1912.

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CALENDAR

- Aug. 4-7—Summer Conference (Meeting of vocational agricultural instructors and directors at this School).
Aug. 14—Final lecture-demonstration on canning and jelly-making by Professor William R. Cole of Massachusetts State College.
Sept. 8—Opening date of School for new students Agricultural Department.
Sept. 8—Opening date advanced students Homemaking Department.
Sept. 9—Opening date for new students Homemaking Department.
Sept. 9-12—Topsfield Fair.

The Conference

After an absence of six years the conference of vocational agricultural teachers is to be held with us again. The Essex County Agricultural School and the Agricultural Department of the Reading High School are joint hosts and we wish herewith to extend our heartiest welcome to you.

In this period of time those of you who visited us before will, we hope, find many changes and some improvements. We should show you in this interim a considerable increase in our teaching facilities as demonstrated in our improved nursery and orchard plantings, larger fields showing increased fertility, better barn, shop, and poultry equipment for housing our animals and tools, and for carrying on the general practical plans of the school.

Often one feels a trace of pessimism in his work, especially after too close and too concentrated application. We sincerely hope that your visit with us in which you are bound to use us more or less as a measuring stick will cause you to feel that your enterprises and your projects are outstandingly good and that these contacts will cause you to take up your return to work with increased vigor and enthusiasm.

Alumni Notes

Donald Anderson, class of 1923, is at the State Institute of Applied Agriculture in Farmingdale, Long Island, employed as manager of the New York State Egg Laying Contest. In early July he visited the School with his wife and three children.

Wallace Moreland, class of '21, is assistant agricultural editor for the New Jersey Experimental Station in New Brunswick.

(Continued from p. 1, col. 2)

If this short article permitted we would like to expand on the various features which have rightfully crept into our work as subject matter conferences, reports of findings of standing committees, a strongly organized association, attention which is given to the studying of special agriculture in different regions of the state, and last but not least the fine spirit of cooperation and good fellowship which has grown up between the Department and the teachers, and amongst the teachers themselves.

It is our sincere hope that the conference of August, 1931, may add one more link to this useful lengthening chain of experiences.

New Radio Broadcasts

Station WAAE, of the Yankee Network, is now presenting a new broadcast known as Farm Flashes, prepared by the Extension Service of Massachusetts State College in co-operation with the United States Department of Agriculture and the Extension services in each county. Farm Flashes are on the air daily except Sundays and holidays from 12:15 to 12:30 P. M.

It is the plan of Farm Flashes to have each day's broadcast devoted to certain subjects. For example, fruit topics will be scanned on Mondays; poultry on Tuesdays; soils, vegetables, and field crops on Wednesdays; animal husbandry including dairy industry on Thursdays; general horticulture on Fridays; and news, including anything which does not fall in these other classes on Saturdays. Of course this will vary according to what news there is to tell.

Through the courtesy of station WHDH, these same broadcasts will be repeated by them at 1 P. M. for ten minutes only.

State-Wide Dairymen's Association to be Organized

On Thursday, July 30, at 10:30 A. M. a committee of twenty-two, appointed on March 17 at Worcester to originate a set of by-laws, will meet at Amherst to organize a State-wide Dairymen's Association, elect officers, and adopt those by-laws which seem most agreeable.

News of the School at a Glance

June 25

The seventeen hives of bees belonging to the School and cared for by Instructor G. A. Meigs, were thoroughly inspected by Mr. Van de Poele, State Inspector.

July 6

John McNair, a member of this year's Senior class, who is employed during the summer as cow tester by the Pomfret Jersey Breeders' Association in Pomfret, Vt., visited the School on July 6. While in East Barnard, Vt., Student McNair purchased a hand-made apple parer said to be at least one hundred years old which he added to a collection the School is making of rare and old machines and farm implements.

This particular utensil, made almost entirely of wood, including wooden pegs, perfectly rounded, typifies the extreme care and exactness with which articles of that period were made.

Future Farmer Jottings

Song Writing Contest

A prize of \$150 is being offered to the person or persons who will write an F. F. A. song which is accepted as the official song of the organization. Briefly, the rules include the following requirements. Composition must be original. Words and music may be by the same or different authors. Two copies must be sent with the complete name and address of the author (or authors). Entries must be mailed before September 15 to Executive Secretary, Future Farmers of America, 1523 "L" St., N. W., Washington, D. C.

Public Speaking Contest

The State Public Speaking Contest for agricultural students, promoted by the State Chapter of the Future Farmers, is to be held at this School, Thursday evening, August 6, in conjunction with the Summer Conference program. The participants in this contest are the winners of previous contests held in their respective schools.

F. F. A. Manuals

The F. F. A. manual may be obtained from the publishers of the Farm Journal, at 15c per copy. Address the publishers at Washington Square, Philadelphia, Pennsylvania.

Project Tours

Two student project tours were sponsored by the Future Farmers on July 8th and 15th, one a vegetable tour, the other, general.

There is no Bay State Dairymen's Association as yet. A statement previously announced, intimating that one had been organized, is therefore erroneous.

All Aboard for the 1931 Poultry Convention July 30 and 31

County agents and poultrymen should reserve July 30 and 31 for the poultry convention at Amherst.

Headliners for the Poultry Convention are: "Suggestions on Overcoming the Effects of Present Economic Conditions," "Poultry Diseases and Their Control," "The Solution of Marketing Problems Now Confronting Massachusetts Poultrymen" and "The Economics of Feeding Practices."

From the above it can readily be seen that the program is based on present-day needs of the industry. As usual, the M. S. C. instructional staff will be supported by outside speakers of national reputation, county agents and poultrymen who have real messages to deliver.

The poultrymen's dinner that was so popular last year has been adopted as an annual event and will be held at the Lord Jeffery Hotel, Thursday evening, July 30th, at 6:30 p. m.

The principal out-of-state speakers are Professor W. R. Graham of Guelph, Ontario, Canada, who "knows his oats" (feeding problems), and who needs no introduction to our Massachusetts poultrymen; Mr. J. I. Taggart of the Smith Incubator Company, Cleveland, Ohio, who "knows his incubator," and Professor E. A. Perregaux, Connecticut Agricultural College, who "knows his cooperative marketing."

The poultryman who misses this program will miss one of the greatest treats of his life.

Let's go! J. C. GRAHAM

(Continued from p. 1, col. 3)

be the happy comfort it previously had been.

I am not trying to discourage meetings where garden problems are discussed. Most certainly not. I do emphasize however that what you may have done is not all wrong simply because it does not agree entirely with the ideals of another.

We all have ideals and enjoy certain plants. We have looked upon an ideal garden and want to build toward it. We may laugh at our first attempts a year later—but no one else should. We continue to plant, move, read, observe, listen and make our gardens. We don't have all perennials because someone has said that a perennial garden is a lazy man's garden, a feast or famine of flowers, so we use annuals to fill in and brighten here and there as the perennials pass. We use fruit trees, shrubs, evergreens, and large spaces of healthy green grass. We do it with our own hands. We love it. We find our neighbors doing the same thing. Is our garden satisfactory? "Yes." Not perfect perhaps, but ours, and quite satisfactory. C. S. WRIGHT

Essay Prize Offered

Since plans are underway for a fitting observance of the two-hundredth anniversary of the birth of George Washington in 1932, it seems proper to call attention to Washington's ability as a farmer.

The contest is open until January 10, 1932. Further information will be published in our next issue.

What to See at the Conference

Don't overlook the Half Way Stand on the Newburyport Turnpike near the school garden. It is one of the seven stands displaying the new Bay State signs.

If interested in beekeeping visit the School apiary of twenty-three colonies. (No personal contacts required.)

Preliminary work is now going on for the construction of a new farm shop near the poultry plant.

Horticulturists will be interested in the fruit nursery and orchards across the road from the School building as well as the ornamental nursery just north of the main building.

Livestock men won't want to miss the barns built by the Farm Shop division.

Our School library has recently been rearranged for convenience and attractiveness. Do you like it?

Graduating classes now add their portions to the cement walk between the two school buildings.

Poultrymen will find an interest in the utilization of the 12 x 16 brooder house as a trap nest unit for completion of the year's records on selected birds.

Exhibits sent from other county schools and high school departments are displayed in the main hall and adjoining rooms. All agricultural teachers in the State were urged to send material, thus making it representative of vocational agriculture in Massachusetts.

The School garden, just back of the Half Way Stand, is worthy of inspection. Why not get a tilt of the extensive varieties grown there?

See the flower beds and borders our Homemaking girls planned and planted.

The student-operated greenhouse and frames invite your inspection.

Two New Specialists on State Extension Staff

With the interest in home grounds, community beautification, and agricultural engineering constantly increasing, the State College Extension Service has recently answered the call for specialists in these lines by adding two new members to the Ex-

Vegetable Garden Projects Visited

Five instructors, thirteen students, and one visitor made up the party on a tour of vegetable garden projects on July 8th. Instructor E. E. Metcalf had selected six projects for study in addition to the school market garden and the Half Way Stand on the Newburyport Turnpike near Maple St., in Danvers. This stand is now conducted under the management of the Essex Chapter of the Massachusetts Future Farmers' Association, with Student Albert Daggart in charge.

Despite the excess of rainfall

in June the gardens were in excellent condition and the students profited by an exchange of ideas as to varieties planted and methods used on the different projects visited.

After a stop at the Orlando Farm in Middleton where Allen Baker has a project, the party went to the home of Charles Buck, who is developing a thirty-acre farm in Rowley. This student with no previous experience is carrying on gardening, poultry, and fruit projects and is doing creditable work.

After lunch the group visited the John Chadwick farm in West Buxford where student Edward Glowacki is employed. Then followed stops at the extensive market garden farms of Mr. N. Perry, and Mr. John Shirley. At the latter farm the students were shown the plot of 10,000 tomato plants pruned to two leaders and growing on wire trellises. The last stop was made at the home of Austin Basso in Andover. G. E. GIFFORD

tension staff. They are Arnold M. Davis, assistant horticulture specialist, and W. C. Harrington, extension agricultural engineer.

Mr. Davis was graduated from Massachusetts State College in June. He has made a careful and successful study of landscape gardening, planning of flower gardens, planting and care of shrubs, trees and lawns, and is fully capable of answering the requests which are steadily arising with respect to home ground and community improvement.

Mr. Harrington is a graduate of Cornell University, class of 1913. He has served as engineer with the New York Highway Commission, in the engineering corps of the United States Army and recently as representative of the Portland Cement Association. He is eager to make improvements in farm water supply systems, farm sewage disposal, lighting systems and farm buildings.

The board of trustees approved the addition of the two extension departments and the appointments of Mr. Davis and Mr. Harrington were effective July 1, 1931.



CUPBOARD

BREAKFAST TABLE

The combination cupboard and breakfast table which is illustrated above was built as a result of the "Better Kitchens" project which was conducted in South Lynnfield.

Storage space was scant so when Miss Crawford showed the class a picture of a similar table and shelf combination and suggested that there might be something in the attic that could be used, we proceeded to take a look. Sure enough, there we found an old black walnut commode and some boards which were once the backing on a large mirror.

We brought the commode downstairs and chiseled off the familiar bunches of grapes which a previous generation had glued onto the two doors and removed the handles from the drawer. A little plastic wood and sand paper used with just the right amount of elbow grease, and the foundation of our cupboard was ready.

Lacking an old bookcase of the right dimensions we decided to have the carpenter make the shelves and uprights as well as the table top and leg. These the man of the house fitted together using the old mirror back to board up the back of the case.

The table top, which is a trap door when the cupboard is closed, was made of boards glued together and cleated on each end. These cleats were put on with a tongue and groove to prevent warping.

The millwork and labor cost us five dollars and sixty-five cents and the hardware was found in the ten-cent store.

We bought a pint each of yellow and brown paint and had enough left to cover two unpainted chairs which we bought for a dollar and a

half apiece from a mail order house.

The little transfers were easily put on in a few minutes and the striping was done by pressing two strips of adhesive tape around the four sides and painting between them. When the paint was thoroughly dry the tape was removed. BEULAH OSTRANDER

Better Homes Day

The women's section of the County Extension Service feels well rewarded for its effort to extend a program of practical homemaking advice, with an attendance of over two hundred guests at the eighth annual Better Homes Day held at the Essex County Agricultural School on Wednesday, June 10. Twenty towns in Essex County were represented, with Extension workers and guests present from Hampshire and Middlesex Counties.

The program opened with greetings from Mrs. Earl Bessom, chairman of the Advisory Council, Fred A. Smith, Director of the School, extended a welcome, and pointed out, through reports dated in 1825, the difference between women's activities then and now.

Following Mr. Smith's address of welcome, Miss Marion P. Crawford, County Home Demonstration Agent, and to whom, with her assistants, Mrs. Mary McIntire and Mrs. Mary Roundy, credit is due for Better Homes Day, gave a report of the vastly increasing number of communities which are being aided by extension workers.

At 10:30 Mrs. Annette T. Herr, State Home Demonstration Leader, challenged all homemakers present to provide something in each of their homes on which the younger generation might lean.

Winners at State 4-H Club Contest

Chosen at the State 4-H Club Contest held on June 29 at Worcester, as a delegate to the National Club Congress in Chicago, Mary Marley will represent Middlesex County as first prize winner in the party dress class.

Other first prize winners in each class from each county represented at the Worcester Contest will receive a free trip to Camp Gilbert in Amherst the last week in July.

Essex winners

at the Contest included: Esther Usher, Danvers, first prize winner in the Health Contest for having shown the greatest improvement over two years; Leverta Knox, Groveland, second prize winner in the school dress contest for those girls twelve years of age or under, and E. Gertrude Sheverrell of Groveland, third prize winner in the dress contest for those girls over twelve.

Out of county first prize winners in the dress contests were: Helen Rudolph, Middlesex, Class I, including girls twelve years and under; and Althea Marley, Middlesex, Class II, for girls over twelve.

First prize winners in the health contest outside of the Essex winner were Louise MacDougall, Middlesex; and Donald MacDonald, Plymouth.

Final Lecture by Professor Cole, August 14

A third and final lecture-demonstration on canning and jelly-making by Professor William R. Cole of Massachusetts State College is being anticipated by many homemakers on Friday, August 14. Previous meetings have been well attended by seekers of a scientific and economic process upon which to base the canning of fresh fruits and vegetables. Anyone who has missed the first two meetings is urged to profit by this last, which is offered to you through the service of the Women's Extension Department.

Professor Clark L. Thayer, of Massachusetts State College, guest speaker of the morning, illustrated with a gorgeous array of cultivated flowers a lecture of intense interest on Flowers and their arrangement in the home, emphasizing color harmony especially.

After a basket lunch, Miss Mary Pozzi, Assistant State Leader, conducted community singing.

As a fitting conclusion to a day of varied expressions of enthusiasm, Dr. James Gordon Gilkey, pastor of the South Congregational Church in Springfield, talked informally on Keeping Enthusiastic about One's Work, giving special weight to the thought that there's a large world on the other side of a small door.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 12

HATHORNE, MASS., AUGUST, 1931

No. 8

Essex County's Part in Beekeeping

Modern beekeeping began in 1853 with the Rev. E. L. Langstroth of Andover. He published a book on the use of a movable comb in the hive. Previous to this time the hives and fixtures were of three general types: the natural log or so-called "gum," which was cut from a bee tree, straw skeps (of European design), and honey boxes having a capacity of between one and two bushels. In all of these earlier types it was necessary to kill the bees with sulphur fumes if any honey was wanted. Mr. Langstroth's invention made it possible to remove the combs from the hive and substitute others without destroying the bees. Improvements on this movable frame followed in rapid succession, until now all are standardized around the so-called Hoffman frames.

Another Essex County pioneer was Henry Alley of Wenham, who was a very successful honey producer and queen raiser of the post civil war period. He is said to have courted and married for his second wife a New York woman whose very prolific queen bee he could obtain in no other way. Mr. Alley's method of rearing queens has enabled American queen-raisers to produce quality queens "en masse." The several appliances perfected by him have materially lightened the task of the beekeeper.

Bees are a decided asset to the farmer, because they work not for themselves alone but fundamentally for man, in the pollination of trees and plants in the orchard, field, garden and greenhouse. Of the ten million named insects the honey bee is the only one which man can or does control for his own uses.

An intensive campaign is being conducted in Essex County this summer by Mr. John Van de Poole and Mr. John Shuman, State Apiary Inspectors under Dr. Gates of the Department of Agriculture, to make sure that no bee diseases are allowed to exist. A state law says that all bees must now be kept in the modern hive with movable frames. Only a very small per cent of disease has been found in this county. Essex is one of the important counties of the State in view of the numbers of colonies kept. Interest in beekeeping is being stimulated, because for every dollar of returns received from the

hive, twenty dollars' worth of pollination value is returned to the beekeeper and his neighbor in abundant crops in the orchard, field, vegetable garden, and greenhouse.

—G. A. MEIGS.



PATRICK CURLEY
MILK INSPECTOR, GLOUCESTER

Summer Conference

The twentieth annual Conference of Directors and Instructors in Massachusetts Vocational Agricultural Schools and Departments, held this year at the Essex County Agricultural School in Hathorne, drew an attendance approximating eighty-five for the four days, August 4-7. A welcome by Trustee R. H. Trefry and addresses by Robert O. Small, Director in the Division of Vocational Education, Massachusetts Department of Education, and Dr. C. H. Lane, Chief of Agricultural Education of the Federal Board for Vocational Education, made the first morning a notable one. The rest of the day, devoted to project visits of alumni and undergraduates as well as places of interest in Gloucester, was suitably rounded up with the annual banquet, held at Bass Rocks, Gloucester. Wednesday was filled with further project visits and the Annual Association Business Meeting that evening, while Thursday was devoted to Round Table Conferences and the State Public Speaking Contest, with Worcester County taking the first two prizes and Agawam High the third. On Friday, the closing day of conference, several Boston markets were visited from dawn until noon, when the conference members dispersed.

Gloucester Sets An Example For Other Communities

A little over two years ago County Agent F. C. Smith, co-operating with the State Department of Agriculture and the Board of Health of Gloucester, conducted a survey in which all milk sold in the city was tested. The results of these first tests were not as satisfactory as the local Board of Health desired, and they sought help from the Extension Service with a view to improve the milk.

Mr. Patrick Curley, an agent of the board, was appointed milk inspector, and after taking a short evening course at the Essex County Agricultural School under Instructor J. E. Eastwood, he set up a laboratory in the City Hall and began a systematic testing of milk samples in the city.

With Mr. Curley well able to handle the milk testing end, the County Agent, with the co-operation of the State Department of Agriculture, directed his attention to the improvement of the sources of the milk supply for the city, with the result that two years later all herds supplying milk to the city were free from tuberculosis. A test in August, 1930, proved the value of the undertaking, inasmuch as all milk in the city fell within the first two grades. This result was highly satisfactory, and so the work of Mr. Curley as milk inspector in the city continues. He has demonstrated that local boards of health may improve the milk conditions in their respective communities if they go about it with proper support and understanding.

Officers of the Association for the ensuing year are:

President—E. J. Burke, Smith Academy, Hatfield.

Vice-President—W. T. Pettet, Bristol County Agricultural School, Segreganset.

Secretary-Treasurer—H. S. Nelson, East Weymouth High School, East Weymouth.

Executive Committee—Above officers and J. G. Glavin, Arms Academy, Shelburne Falls; P. W. Brown, Hopkins Academy, Hadley; H. A. Mostrom, Essex County Agricultural School, Hathorne; F. H. Weiss, Norfolk Agricultural School, Walpole.

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CALENDAR

Sept. 8—Opening date of School for new students Agricultural Department.

Sept. 8—Opening date for new students Homemaking Department.

Sept. 9—Opening date advanced students Homemaking Department.

Sept. 9-12—Topsfield Fair.

Oct. 1—Opening date advanced students Agricultural Department.

Extracts from an Article on Summer Conferences by R. W. Stimson

Professional Improvement has been part of the official program of Vocational Agricultural Education in Massachusetts from the beginning. It took two forms: first, things which could be done during the school year, sometimes involving leave of absence from active teaching during part or all of the winter term; and second, meetings of directors and instructors with the State Supervisor in the summer for one day and more recently for the better part of a week. The programs, as professional improvement enterprises, have more recently been in the immediate charge of our Supervisor of Agricultural Teacher-Training, Mr. F. E. Heald.

The first meeting was held at what is now known as Massachusetts State College, at a convenient time during the summer school session. This enabled us to draw on college talent for subject matter without great inconvenience to those who helped us. Every such conference has been featured also by help from outside the State.

At first on all our programs we included graduates. Thus the important part of the agricultural "career motive" was featured as an element essential to the success of our movement. A casual visitor who saw such

a graduate, heard him tell about his training, and heard his account of what he had already done and what he hoped to accomplish, said afterwards, "At your conferences always have a graduate!"

Soon our graduates became so numerous and their achievements so varied and so instructive, that our summer program was changed to include what was described by another visitor later as a "Conference on wheels." Part of the time was reserved for going to see graduates on their own premises, to get for ourselves real pictures of their problems, of their accomplishments, and of their prospects.

This necessitated moving our conference away from the college from time to time. A scheme of rotation more recently has been adopted, so that one year the conference will be in southeastern Massachusetts, another in western or central Massachusetts, and another in northeastern Massachusetts, as is the case the present year.

No man can lift himself by his own bootstraps. We need men from outside the State. We need men from the college. We need our own men, each of whom is working under conditions somewhat similar and in some cases considerably different from our own, in order that our eyes may be kept lifted, our outlook be kept hopeful, and our methods be kept sound.

Alumni Notes

Information has been received that Edward Dodge, class of 1926, is head herdsman on the Highwood Walker estate in Manchester, Mass. He also operates a dairy.

Russell Ray, class of 1927, is flying high as mechanics' pilot in the United States Air Service at Rantoul, Illinois. His address is Chanute Air Field, Rantoul, Illinois.

Warren Shiers, class of 1930, is at present employed as herdsman on the Gilsland Farm in Portland, Maine.

James Rogers, '21, is employed at the Park and Pollard Experimental Farm in South Lincoln, Massachusetts.

Carl Stanton, professional landscape architect of Peterboro, N. H., and a graduate of this School in the class of 1916, was one of the main speakers for home flower growers at the annual Farm and Home week held at Amherst, from July 28 through 31.

Roger Peabody, class of 1930, formerly employed at the Braneland Farm in Andover, is now in charge of the poultry at the Castle Hill Farm in Ipswich.

Donald Williams, class of 1930, is employed at Mr. Ainbinder's poultry farm in West Peabody.

Washington Essay Prize Offered

The Washington essay prize, offered to vocational pupils for an essay, story or theme in which the central theme shall be Washington's relation to or influence on farming in America, is an incentive to all boys partial to farming or history. The exact title of the essay is not limited, but excellence of English composition shall not win for the paper which contributes little to the idea stated above.

For preliminary study the following general provisions should be announced at this time:

1. *Eligibility.* Any bona fide member of a vocational department of agriculture or of a vocational agricultural school in Massachusetts is eligible to compete, provided: (a) he is enrolled as a vocational pupil in the school year 1931-32 (not completing his course in the fall of '31), and (b) he has been employed for the major part of his time during the summer of 1931 on an acceptable, supervised agricultural project or farm practice. (This eliminates seniors of 1931 and incoming freshmen of the fall of 1931.)

2. *Date of the Contest.* All manuscripts must be in before January 10, 1932. Some provisions will be announced later for a local elimination in schools having three or more contestants. In such cases the papers shall be in the hands of the local judge before Christmas vacation.

3. *Originality.* Wide reading is encouraged. Limited quotations, so designated, are permitted. The organization and diction, however, will be the pupil's own. The teachers will be permitted to mark errors in grammar, punctuation, rhetoric, etc. The pupil is to make the proper corrections before copying. Otherwise the construction must be the pupil's own work. Suggested titles or themes may be offered and references found for the pupils. Further details of this ruling will be issued later.

Future Farmer Jottings

The Massachusetts Chapter of Future Farmers of America has recently applied to the National organization for affiliation with that association. The charter is pending as this edition goes to press.

The local chapter of Future Farmers will exhibit at the Topsfield Fair, showing activities of various farm enterprises with their products. The pictorial exhibit used recently at the annual summer conference held at this School will be again displayed, depicting the projects of seven undergraduates in seven different enterprises.

Special Apple Market Report Resumed

The Division of Markets of the Massachusetts Department of Agriculture announces the resumption of the Special Apple Market Reporting Service. Reports will be issued twice a week during the active fall marketing season and then weekly through the season into April.

The principle features covered are as follows:

Boston Market News

Prices by varieties and grades of apples received from local sources and from other New England states.

Comment on demand and supply.

Reports on condition and appearance of arrivals and reason for high and low prices.

Prices and comment on supplies from competing sections.

Worcester, Springfield, Providence and New York

Similar reports as for Boston, but in more condensed form.

News from Country Shipping Points

Reports on crop conditions by varieties.

Reports on prices paid by buyers at farms.

The above for nearby sections in New England and for important competing areas.

Cold Storage Reports

Weekly reports on Boston cold-storage holdings, showing amount going in, on hand, and being withdrawn.

Weekly reports of holdings of important varieties, particularly McIntosh.

Monthly reports on Worcester and Springfield, Providence, and Portland, Maine, holdings.

Monthly reports on U. S. holdings.

Export Market News

Reports of sales at Liverpool and other foreign markets.

Comment on crop conditions affecting export markets.

News on Other Fruits

Reports on prices, supply, etc., of peaches and pears at principal markets.

Reports may be obtained by sending your request to W. R. Cole, Secretary, Massachusetts Fruit Growers Association, Amherst, Massachusetts, and enclosing the cost of postage which is \$1.00 for the season (approximately 50 issues) if you wish them by first class mail, or 75 cents if by second class.

Announcement of Corn Cutting Demonstrations

As a part of the corn-borer control in charge of the United States Department of Agriculture, recent inventions provide attachments for

corn harvesting machinery, enabling corn to be cut low to the ground, thus obviating the necessity of plowing the stubble under. The County Extension Service has made arrangements for two such corn-cutting demonstrations to be held on the following dates: September 17, at 2 P. M., on the grounds of the Essex County Agricultural School in Haverhill; September 18, 2 P. M., on the farm of Chauncey Gleason, East Broadway, Haverhill.

TOPSFIELD FAIR
September 9-12

BROCKTON FAIR
September 15-19

NEW ENGLAND FAIR
at Worcester
September 29-October 3

EASTERN STATES EXPOSITION
at Springfield
September 20-26

Professor R. H. Barrett and R. L. Mighell of the Farm Management Department, Massachusetts State College, are working in the county among vegetable growers, taking motion pictures of the different methods employed in growing and preparing asparagus, beets, carrots and celery for market. They are in hopes of aiding the farmer by pointing out useless operations and indicating time-saving cuts.

Entries of Fruit and Vegetables for Department K at Fair

There is an excellent opportunity awaiting children and youths under 21 to exhibit fruits and vegetables at the Topsfield Fair, which is to be held from September 9 to 12 inclusive. Entries are made to Department K, supervised by Instructor Eastwood of this School. Those wishing to exhibit should write to R. H. Gaskill, Topsfield, Mass., for a complete premium list. See if you can get a prize!

Seven Bay State Signs Used in Essex County

At present there are seven roadside stands in Essex County which display to the buying public the Bay State Farm Products sign, which is sponsored by the Massachusetts Department of Agriculture. These signs are leased from the Massachusetts Farm Bureau to stand owners, 25 per cent of whose products bear the New England grade label. This guarantees to the customer products which meet the high standard of quality set by the State Board of Agriculture.

How Many Pounds in a Bushel or Peck?

This is a question which is asked several times a year. People inquire for a weight volume reference table of various farm products.

In 1921 the State of Massachusetts changed its method by which fruits, vegetables, etc., could be sold. At the present time in Massachusetts it is not legal, in selling, to say a peck of potatoes weighs 15 pounds or a peck of spinach weighs 8 pounds, etc. The committee in investigating found that the apples, for instance, varied all the way from 32 to 54 pounds per bushel, and other products accordingly, depending upon the variety, season of year, and maturity.

The State therefore passed a law which requires that all fruits, vegetables, etc., when sold at retail, must be sold by avoirdupois weight or numerical count. Therefore, the table of approximate weights and measures of capacity in Massachusetts was done away with.

A copy of the law may be had by sending to the Division of Standards, Room 194, State House, Boston, or to this School.

G. A. MEigs,

Instructor in Marketing.

Project Tour

A general project tour, conducted under the auspices of the Future Farmers on July 15, included visitations to the following students on project: Edward Brown, Swampscott, floriculture; Carl Swanson, Lynnfield, ornamental; John MacKenzie, Wakefield, poultry and fruit; Dorral Perry, North Andover, dairy and general; and Alden Baker, Middleton, vegetable gardening. In addition the School garden and Future Farmers' roadside stand (with Student Doggart in charge) were inspected. Instructors and students were very favorably impressed with the progress which is developing yearly in project work.

These tours are conducted for the purpose of acquainting the students with the best farm practices carried on at the various projects visited. This particular tour was under the direct supervision of Instructor C. M. Wood.—Condensed report received from Student Dora Winchester, Saugus, Class of '34.

A good school lunch contains milk, at least one dark sandwich, not more than one sweet sandwich, fruit or vegetable, and a simple dessert, such as stuffed prunes, simple cake or cookies, or two or three pieces of good candy.

Fall Projects in Women's Extension Department

Miss Crawford, Home Demonstration Agent, has returned from her vacation and is ready to receive any requests which the town chairmen like to make for fall work. The projects to be stressed are: Home Nursing, School Lunch Box, and a new clothing project prepared by Mrs. Page called "New Clothes From Old." A descriptive outline of the latter project will be found below.

In October, Mrs. Morley will begin her Child Development work; Miss Foley will give two demonstrations on Low Cost Meals; and Slip Cover lecture-demonstrations will be given by Mrs. Haynes.

NEW CLOTHES FROM OLD

Stretching "clothes dollars" to the utmost through the renewing of the wardrobe is the theme of this project. Lesson I—*Analyzing the Problems.*

When is it worthwhile to remodel garments?

Conditions under which Spotting, Dry Cleaning, Laundering, and Dyeing can be done safely.

Knowing your fabrics.

Looking over garments brought out and discussing their renovation and remodeling problems involved.

Lesson II—*Reconstruction of a Garment.*

Points on combining colors, lines and textures.

Factors making color, line and texture becoming to individuals.

Recutting and refitting problems.

Lesson III—*Reconstruction continued.*

Stitches and seam technic.

Uses of finishes old and new.

Pressing technic.

Necklines and faces.

Lesson IV—*Other Remodeling.*

Ways of adjusting various parts of costume to make a unified and harmonious whole.

New Hats from Old.

One Hundred Women Attend Canning Demonstration

Prof. William R. Cole, assisted by Mr. C. C. Rice, has given a series of three canning demonstrations at the Agricultural School under the supervision of the Extension Department. A most enthusiastic group of women attended these demonstrations.

The interest shown and the questions asked seemed to prove that home canning is a practical way of reducing the winter food budget. The demonstrations included the preserving of string beans, strawberries, peas, raspberries, carrots, corn, and peaches. Twenty-four communities were represented by one hundred and ten women.

Broadcasts for Extension Women

Women who are working with the Extension Specialists in Home Economics will be interested to listen in on the broadcasts listed below, over Station WBZ, from 12:35 to 12:45 on the following dates:

September 14—Mrs. Page, "Starting the Right Clothes to School."

September 21—Mrs. Morley, "Keeping the Child Fit for School."

September 28—Miss Foley, "Feeding the Children."

October 5—Miss Pozzi, "The Value of Recreation."

October 12—Mrs. Herr, "What the Community Owe the Child."

October 19—Mrs. Haynes, "Time Savers in Contest Kitchens."

October 26—Miss Foley, "Better Food for Less Money."

Dates for November and December will be listed in next month's issue.

Household Queries Answered

Question: Is oxalic acid present in spinach in such amounts as to be harmful?

Answer: Although there is a small amount of oxalic acid in spinach, experiments have shown that it is not present in amounts to make it in any way harmful.

Question: Should strong vegetables be cooked with the cover on?

Answer: No. Strong vegetables, such as turnips, cabbage, and onions, should always be cooked with the cover off. They are less strongly flavored, easier to digest, and make less odor in the house.

Question: Are there different kinds of iron in prunes and raisins?

Answer: No. Each fruit contains a similar iron, though contrary to popular opinion, prunes contain more than raisins.

—Prepared by MAY E. FOLEY,
Extension Nutritionist.

Communities Plan for Fall Work

Extension Committees all over Essex County are making plans for the coming year's work. Since our annual meeting in May, tentative plans have been in the making in the following communities: Home Nursing—Danvers, Bradford; Clothing—Lynnfield Center; Child Development—Boxford, Salisbury, Merrimac, Andover, Newbury; School Lunch Box—West Gloucester, West Andover, Salisbury; Chair Canning—Amesbury.

Many other communities are forming groups but have not as yet notified the Home Demonstration Agent of their completion.

Compensation in 4-H Club Work

"Every act rewards itself." No exception is made in 4-H Club work. Eighteen delegates from the Essex County clubs chosen for achievement in their respective projects, led by Horace J. Shute, County Club Leader, were sent to Camp Gilbert on Friday, July 24. This represents the largest delegation which ever attended the camp from this county and is regarded as a demonstration of the rapidly growing interest in 4-H Club work. Following is a list of the Essex County delegates: Esther Usher, Danvers; Eleanor Buckley, West Newbury; Marion Webb, Beverly; Blanche Hilsley, Georgetown; Mary Kacharian, West Boxford; Clara Furbush, Groveland; Justin Little, West Newbury; Norman Grant, Newburyport; George Lambert, West Boxford, and Nancy Ordway, Groveland.

In connection with Camp Gilbert, a Local Leaders Training School is held each year. This year's leaders from Essex County were: Miss Alice Albrecht, North Andover; Miss Catherine McInnis, West Boxford; Mrs. Leon Jordan, Groveland; Mrs. Alvin T. Zink, Ballardvale; Mrs. Charles Fowler, West Newbury; and Mrs. Ada Usher, Danvers.

Silas Little of Newbury and Margaret Savoian, Methuen, attended a Junior Leaders' Training School for one week previous to the regular Camp Gilbert session. A group of junior leaders aided in carrying out the Camp Gilbert program. Silas Little has been in club work for six years and is at the present time President of the Essex County 4-H Service Club. He has won many outstanding honors in 4-H work, including a trip to the National Camp in Washington. Miss Savoian is a club member of eight years standing, in which she has carried many projects and served as local leader for the Methuen clothing club.

Making the best better is reward in itself.

Question: How and when can tomato and orange juice be given to babies?

Answer: Strained tomato or orange juice should be added during the second month. Start with a half teaspoon of strained juice diluted with a half teaspoon of cool, boiled and unsweetened water. Gradually increase until at six months the baby is getting a tablespoon of juice, and at one year, three tablespoons.

ESSEX FARMER AND HOMEMAKER

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VOL. 12

HATHORNE, MASS., SEPTEMBER, 1931

No. 9

The Open Lawn

To those followers of New England's motor trails who revel in native landscapes there is no feature more typical of the region than the open field bounded by hedgerow and wall. These fields are relatively small—of an area to be quickly encompassed by the eye—and they are frequently viewed through a gap in the roadside bushes or are framed by overhanging shade trees. Trees, spared by generations of landowners, and clumps of native shrubs often obtrude from a neighboring woodlot. Such a landscape of open fields, with intervening woods, rocks, pastures, swamps and streams, the long reaches of marsh and sand dune, and the restless, rolling ocean lures the nation's travellers, and delights and satisfies our own New England consciences.

Then, should we not transfer the spirit of the open field to our home lot or farmstead, and there, refined, reveal it anew and daily in the open lawn with its enveloping trees and shrubbery. May we not repeat bits of the native landscape, and utilize native species of plants to our everlasting enjoyment.

The open lawn, indeed, is "a thing of beauty and a joy forever." Across its weedless stretches shadows play; it is pleasant to walk upon, it is restful to sit upon. From the open lawn pictures innumerable are easy of composition by the plant lover from the store of materials at his disposal. Over the open lawn children scamper, and household pets give life to the scene. The open lawn increases the apparent size of the property, gives balance to the composition, and furnishes a canvas, as it were, against which the elements of the home landscape are tastefully arranged.

To block abruptly intimate views of any part of the grounds by a clump of shrubs set centrally in a beautiful lawn is to irritate the visitor and obstruct his free movements and observations. Cluttering a lawn with flower-beds—round, square, or oblong—or with specimen trees or shrubs is to miss the real purpose of these materials. Each such bed may, in itself, be beautiful to look at, but, when viewed as a part of the whole composition, it is easily adjudged to be out of place. Just so, a Blue Spruce in all its magnificence may be so placed as to attract all one's attention even from the house itself, which

surely should be the commanding feature of the home grounds.

Flower beds and specimen plants properly find a place along the borders of the lawn, in the angles of shrubbery, and within the confines of the formal garden with its enclosing hedge, wall or fence.

A little critical study of New England landscapes and of New England home grounds, in a sincere attempt to elevate and refine our inborn senses of propriety and art, will reveal the enduring satisfaction to be had from the possession of an open lawn.

—H. LINWOOD WHITE.



Harold Rogers

Harold Rogers is the sort of graduate of whom the School is extremely proud. When, in 1926, he entered, his father had his first vision of developing their small home, bordering on the Merrimac, and expanding it into a real farm. With the co-operation of Mrs. Rogers and Harold, the farm was planned and laid out. Harold put to practice the knowledge and skill acquired at School. In 1926 his scope of work in an educational program was confined to general farming. In 1927 and 1928 however, he extended his practices to dairying and market gardening. Now, two years after graduation, his father's farm, known as Spring Hill Farm, has been practically turned over to Harold. He plans and lays out the work for the farm helpers, has charge of the accounts, buys and sells cattle, markets the produce, and handles all

(Continued on page 3, col. 3)

Topsfield Fair

The School was well represented at the Topsfield Fair, both in exhibits and executive ways. Director Smith, a member of the Agricultural Society's executive committee, exhibited, for the interest of the Fair visitors, a large display of new varieties of fruit raised in the school nursery. His exhibit of foods seasoned with elderberries caused many envious glances.

Mr. Meigs, chairman of the apian committee, arranged a splendid exhibit of bees, honey, beeswax, and an imported straw skep used formerly as a hive in Ireland.

F. C. Smith, County Agent, was on the cattle and fruit committees.

J. E. Eastwood, chairman of the Children's and Youths' Department, was assisted by H. A. Mostrom and A. L. Dacy in managing a display largely of canned foods.

H. K. Thurlow acted as chairman of an interesting event: the Dynamometer Contest.

A fruit exhibit of McIntosh Reds was neatly arranged by C. M. Wood.

Instructor Cooley created wide interest with his display of economical winter forage crops for dairy cows, consisting of a sheath exhibit and table demonstration.

E. E. Metcalf was chairman of the vegetable committee, assisted by C. M. Stearns.

The Future Farmers' exhibit was the same as that used at the annual summer conference, depicting the projects of seven undergraduates in seven different enterprises.

The 4-H building, supervised by H. J. Shute, had a remarkably fine display of handicraft, canning, clothing, foods, and garden products. The 4-H parade on Saturday afternoon was one of the outstanding Fair events. Canning, clothing, and chair-caning demonstrations were also featured daily in the 4-H building.

The School's main exhibit this year was sponsored by the Homemaking Department. A neatly arranged display booth, trim behind a white fence trellised with green vines, revealed something new in four homemaking phases: clothing, balanced meals, chemistry and art in the home; and academic utilities were adroitly on parade. The success of the exhibit, managed by Miss Moore, with the assistance of her department, was proved by its many visitors.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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CALENDAR

October 1—Upper classes return for regular sessions.

November 24—Graduation exercises (Tuesday before Thanksgiving.)

Editorial

"Education is the first and last duty of the state. It is the surest hope of individual health, excellence, and happiness. It is the foundation of a noble home life. It is the starting point of lifelong learning. It is the mainstay of an alert, far-seeing citizenship. It is the basis upon which industry thrives and improves. It lifts leisure to the realm of creative art and establishes character on the sound foundation of truth, goodness, and beauty."—From the *Journal of National Education Association*.

R. F. Copple, of the United States Bureau of Plant Industry, was at the School Tuesday, September 8, arranging for a demonstration of various mixtures of pasture grasses, as well as different ways of applying lime to the field for alfalfa and white sweet clover.

"A youth who came off a farm to enroll as a student at Morris-Harvey College and who brought a two-year-old steer, five bushels of potatoes and thirty bushels of apples along with him to pay his school expenses, is now a full-fledged student. The steer was butchered and the potatoes and apples are in the college storage bins for use in the cafeteria. Mr. Leonard Riggleman, president, recently announced farm products would be accepted for student expenses because of economic conditions."—*Christian Science Monitor*.

Future Farmer Jottings

Every F. F. A. member will be interested in the plans for the Seventh Annual American Dairy and Poultry Convention to be held October 10-12 at St. Louis, in conjunction with the National Dairy Exposition.

It may be well to remind the Future Farmers that F. F. A. programs are given every second Monday of each month over the N. B. C. network during the Farm and Home Hour. The Massachusetts Station is WBZ and is heard from 1:30 to 2:30 on the Mondays designated.

Alumni Notes

Llewellyn Jones, '29, vice-president of the alumni association, is managing Mr. Robert H. Sawyer's roadside stand on Salem Street in Bradford.

Robert Lufkin Moulton, '29, of Lynnfield, is engaged to Miss Florence Mae Kirker.

Lucinda D. Bousley, class of '16, is now connected with the Boston School of Household Nursing, where she is teaching and supervising.

Aubrey Vaughan, '26, is employed at the Windsor County Co-operative Farmers' Exchange, Inc., in White River Junction, Vermont.

Alfred Bryer, class of '22, is working on the farm of William T. Dodge in Newbury.

News of the School at a Glance

September 8

The Agricultural department opened its doors to eighty new students. In assembly Director Smith greeted the boys, expressing the desire that the School might come to belong to them—and they to the School.

September 9

Fifty new students were admitted to the Homemaking department. Miss Moore, educational manager of that department, welcomed the girls, and explained to them the class regulations.

September 10

All students visited the Topsfield Fair in groups. School exhibits, individual and departmental, were explained by instructors to each group.

September 14

Classes and divisions were organized. The School curriculum is now under way.

Prize Essay Note

A committee consisting of members of both departments of the School, has been selected to prepare for a fitting observance of the Washington bicentennial at this School.

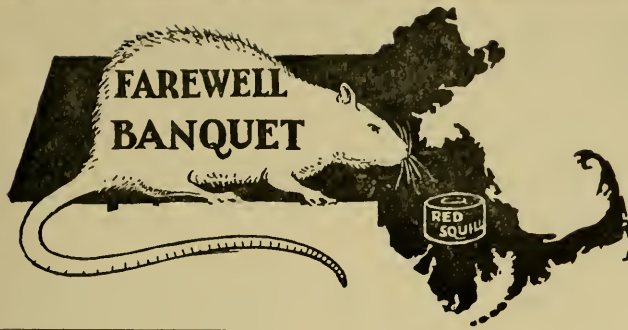
As a part of the first month's English course under Instructor G. E. Gifford, work on the Washington prize essay will be stressed.

SUMMARY OF WEATHER OBSERVATIONS

MAY TO AUGUST, 1931

	May	June	July	August
Maximum temperature	93°	94°	95°	95°
Minimum temperature	32°	45°	52°	47°
Mean daily temperature	57.7°	65.1°	71.6°	69.0°
5-year average '26-'30	54.5°	64.0°	69.6°	67.5°
Greatest daily range	39°	34°	31°	33°
Least daily range	4°	3°	4°	5°
Precipitation	3.46"	7.36"	2.83"	4.49"
5-year average '26-'30	2.85"	2.90"	2.51"	3.49"
Total to September 1	....	....	....	32.70"
Excess to September 1	....	....	....	8.89"
Aver. relative humidity 8 a. m.	69.6%	76.3%	80.5%	79.6%
Number days rain fell	11	14	12	11
Number clear days	12	15	11	14
Number partly cloudy days	9	6	13	7
Number cloudy days	10	9	7	10
Total hours sunshine	246.0	262.0	247.0	241.0
Percent sunshine	54.4%	57.4%	53.7%	55.3%
Total hours to Sept. 1	....	....	....	1707.0
5-year average '26-'30	....	....	....	1787.5

The period covered in figures above has been exceptionally moist, June having recorded more rain than any previous month except one in six years. We have already recorded more rainfall in 1931 up to September 1 than was recorded in the twelve months of 1930. The wet weather has made haying difficult and unsatisfactory in results during most of the season. Temperatures continue to average considerably higher than the mean figures for the corresponding 5-year period. Compared with 1930, 1931 to date has received 11 inches more rain, less sunny by 67 hours, and warmer by quite a margin, especially during May, July and August.



Massachusetts Declares War on Rats

BATTLE WILL START OCT. 30

Red Squill Will Be Main Weapon

War on rats, in fact the biggest war on rats ever attempted in Massachusetts, will be staged on Friday, October 30, the day before Halloween. More than 10,000 farmers in all parts of the state are expected to co-operate with county, state, and federal extension services in this drive on rats.

County Agent Smith has been commissioned as captain for Essex County with general headquarters at the Agricultural School in Haverhill. E. M. Mills, rodent control specialist for the New England States, is the major-general in charge of this unusual campaign.

The plan of attack, according to General Mills, is not to use guns, bombs, airplanes, or other weapons of modern warfare, but to serve the rats a tempting banquet on the night designated. It will be what might be termed a farewell banquet, and when the witches and goblins arrive on Halloween they will have the job of cleaning up the dead rats.

Mr. and Mrs. Rat, Tom, Dick and Harry Rat, and Mary, June and Mabel Rat will have their choice of fish, meat or cereal. Mary and Mabel may be a bit fussy about eating fish, so they are to be tempted by meat and cereal. But here's the secret: these courses will be spiced with red squill. Red squill, in case you haven't heard of it, is the newest and safest rat destroyer known to modern science. Red squill kills rats and mice, but, so far as is known, it is not fatal to human beings, to dogs, cats, or poultry. However, it may make them very sick; so General Mills warns that it should be kept out of reach of domestic animals, children, and irresponsible persons.

The baits are being put up in cans by the Bureau of Biological Survey of the United States Department of

Agriculture, and will be distributed by the county extension services. As a result of purchasing and mixing the supplies of bait in large quantities, three cans of bait can be supplied for 50 cents. Three cans will make 100 baits, or enough to bait an average farm. Homemade baits would cost at least twice this amount, would be less effective, and would be troublesome to make, says General Mills. Baits will be available at the various towns in the county on October 30 for those who send in an order in advance. Circular letters will be sent out to our regular mailing list with an order card. These order cards must be returned to the County Extension Office by Friday, October 23.

"It is hoped that everyone will co-operate in this campaign. Rats are highly migratory and move from farm to farm. Work with your neighbor and give this information to those who might be interested. Only by united effort can the rat pest be eliminated," says General Mills. Write to the County Extension Service for an order card and be sure to tell your neighbors about this county and statewide campaign.

New Supervisor of Dairy Herd Improvement Association

Joseph Reynolds, resident of Attleboro, former student at Massachusetts Agricultural College, and once Superintendent of the Titus farm in South Hadley, is now Supervisor of the Essex County Dairy Herd Improvement Association.

Athletics

Philip H. Coughig, Athletic Coach, announces the following games which have already been scheduled for this Fall's football season: Newburyport, October 24; Wakefield, October 31; Portsmouth, November 7; Marblehead, November 21.

Essex Prize Winners at the Fair

Products exhibited in Department K this year at the Topsfield Fair by students of this School brought thirty-five cash and ribbon awards to eleven exhibitors.

The following students were the winners:

Dora Winchester: two seconds and two thirds; Austin Barro: one first, two seconds, and one third; Walter Lewis: one first and one second; Michael Pickowicz: two firsts and one second; John Lynch: four firsts and one third; Alfred Webb: one first, two seconds, and one third; Theron Johnson: one first, two seconds, and four thirds; Roland Wagner: two firsts; John Gould: one second and one third; William Tinsch: one first; and Chester Dunn: one first.

The School winners in individual and team judging contests were:

John Kachadorian: individual winner of second place in vegetable judging; Michael Pickowicz: second individual scorer in livestock judging; Essex County Agricultural School: second team scorers in livestock; George Lambert, student of the School but judging for the 4-H Club, second individual scorer in poultry; John Kachadorian: first individual scorer; Donald Williams, second, and Carleton Symmes, third, in fruit judging; Essex County Agricultural School: first team scorers in fruit.

The high producing hen from the Meredith Farm, Topsfield, created much attention at the Fair. A record of 302 eggs during the first year and 236 for the second year is without doubt a record for Essex County.

(Continued from page 1, col. 3)
the business details connected with the fifty-acre farm.

In 1931 he set out 1200 raspberry and 2000 strawberry plants, with yields of 3000 and 2300 boxes respectively. He also purchased twelve and a half acres for vegetable gardening—bringing the total farm acreage to fifty.

To keep abreast of recent developments he attended a Unit Course in Dairy Management at the School, and as a result is changing over to purebred stock. He has added a new milk room and is gradually improving the interior of the barn.

Although Harold is but two years out of School, he is recognized by several well-established farmers as a young man who has made his mark and who will continue to improve his position through tireless effort and a wide-awake mind.

Only last August, chosen in company with John Chadwick of Buxford and Robert Wood of Haverhill, Harold Rogers attended the Conference of the National Vegetable Growers Association of America, at Cincinnati.

New Specialist in Home Ground Improvement Starts Work in Essex County

So much interest has been shown by the women of the State in Home Ground Improvement that Mr. A. M. Davis, of Massachusetts State College, has been appointed to help on these lines. Plans are already in the making to start some type of Home Ground Improvement in West Buxford and nearby communities. An effort is being made through home visits to find out the real needs, so that subjects discussed in three or four community meetings may be concrete in their application. To show how diversified the subject may be, we quote from a lecture by H. G. Becker, of Hampden County Improvement League, given during Farm and Home week:

"The home grounds should be divided into three parts. There is the public area, which consists of the front yard; the service area, which includes the garage, clothesline, and sometimes the vegetable garden; and the private area, where we have our garden and play area.

"Bringing out the beauty of the house is the prime duty of the front yard. It should not be cluttered up by shrubs, trees, flowers or hedges. However, the lawn and the house should be tied together by inconspicuous foundation planting.

"Trellis or hedge should conceal the service area. It should be compact, as near the kitchen as possible, and not used as a catch-all for rubbish. The private area should be located where it can best be enjoyed. As all of the family should derive pleasure from it, utility as well as beauty should be included in its makeup. There should be sandpiles for the children and seats for father and mother. Tennis courts and croquet grounds may be included where there is enough space."

Anyone living in the vicinity of West Buxford who would like help in this line, should get in touch with the West Buxford Extension Committee: Mrs. Alexander Price, Mrs. Simeon Pearl, or Mrs. Fred Whittier.

—M. P. CRAWFORD.

Home Economics Broadcasts

In addition to the September and October Home Economics broadcasts whose dates were printed in August's issue of the Farmer and Homemaker, we now publish the dates for November and December. Please remember that these broadcasts are given over Station WBZ, from 12:35 to 12:45 on each of the listed Mondays.

November 2—Mrs. Morley, "Why Children Refuse."

November 9—Mrs. Herr, "Some Laws Which Affect the Home."

November 16—Mrs. Page, "What Weight Clothes."

November 23—Mrs. Haynes, "Chasing Kitchen Blues."

November 30—Miss Foley, "What's New in Nutrition."

December 7—Mrs. Morley, "The Basis for an Allowance."

December 14—Miss Pozzi, "Hikes in the Winter."

December 21—Mrs. Page, "The Furs You Care For."

December 28—Mrs. Herr, "What the Home Economics Extension Service Has to Offer the Homemakers in Massachusetts."

Tomato Juice

Tomato juice for breakfast and for an appetizer at the beginning of the meal is becoming a popular drink. Because of the growing demand for it many homemakers are planning to turn all their surplus tomatoes into juice and can it. The following recipe will give a very satisfactory product for use as a drink, for seasoning macaroni and cheese, as a sauce for hamburger patties, or as cream soup.

Wash the tomatoes and trim off all greenish spots. Place them in a kettle. Crush a few to secure enough free juice to start the cooking. Cover the kettle and boil moderately until the tomatoes are hot. Allow to cool, without stirring, before pulping. Run the cooled tomatoes through a fine sieve or fine colander. If a fruit jar is used to force the pulps through instead of stirring with a spoon, the time necessary for this operation will be reduced one half or more.

Measure the pulp and return to the kettle and boil rapidly without cover until the volume is reduced one half. To this concentrated pulp add 2 or 3 tablespoons of granulated sugar and 1 or 2 teaspoons of salt per pint. Stir to solution. Fill the hot pulp into clean, dry pint jars, partially seal and process them in water bath at boiling temperature for 20 minutes. Remove the jars, complete the seal, and set them aside to cool before storing.

—The Hampden.

Appointment of Specialist in Home Furnishing

Miss Grace B. Gerard, former Home Demonstration Agent in Illinois, has been appointed to the position of state specialist in Home Furnishing for Massachusetts.

The Home Demonstration Agents are glad to welcome Miss Gerard into the Extension family. She will relieve Mrs. Harriett Haynes of some of the work she formerly carried.

Essex County 4-H Members Win High Honors at Brockton

Justin Little, Essex County 4-H member, of Newbury, won a sixty-dollar scholarship, competing with sixty-five members in a vegetable-judging contest, Friday, September 18, at the annual Brockton Fair. His brother, Silas, won fourth place in the same contest. Both boys have been prominent in 4-H work for the last six years—and both have countless ribbons and trophies won through enthusiastic and sincere effort.

Wendell Stackpole of Haverhill was awarded fourth prize in the poultry-judging contest held Thursday, September 17.

Blanche Ilsley of Georgetown won second place in the Singer Sewing Machine contest, and Gertrude Shev-enell third place in the same.

Horace Shute, Essex County's 4-H Leader, superintended the club's livestock show.

4-H Clubs' Place at Marshfield Fair

Essex County stood for a stead at the Marshfield Fair the last week in August, totalling fifteen winnings in vegetable judging contests.

Of the twenty-seven entries in the Junior Vegetable Department from Essex County, thirteen were prize winners. Miss Angel Dederian of Methuen, was awarded two firsts, two seconds, and three third prizes; Justin Little of Newbury, a second and one third; and Proctor Houle, also of Newbury, two firsts, a second and one third.

Of the five boys entering the poultry and vegetable contest, two won prizes: Justin Little took second in vegetables, and his brother, Silas, third.

Essex County's winnings totalled nineteen dollars and a half. Keep it up Essex. The best is getting better.

Question: Do, or can we use too much milk?

Answer: While milk is the most nearly perfect food, it is possible for a child to use too much. One quart a day is the standard for a child under 21, though a little less may be used if the diet is otherwise good. Rapidly growing boys and girls may use more. Some small children with small stomachs, may, if allowed all the milk they want, use it to the exclusion of other foods that are necessary. Vegetables and fruits may in this way be crowded out, and so the child will have an unbalanced diet. No matter how good a food is, it should not form the major part of the diet. It is well to cultivate a liking for all foods, and have the diet varied.

ESSEX FARMER AND HOMEMAKER

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HATHORNE, MASS., OCTOBER, 1931

No. 10

Ensilage Corn

A test has been made this year for the selection of the five most promising varieties of ensilage corn, with the solution that Leaming, Canada Leaming, Burr Leaming, Lancaster Sure Crop and West Branch Sweepstakes promise most. The field selected for this test was land that had been in sod for a number of years with little fertilizer or manure applied previous to this year. After the plowing, which was started on April 14, had been completed, the field was dis-harrowed four times with a tractor disc.

On June 15 five hundred pounds per acre of a 4-12-4 fertilizer was broadcasted with a drill and harrowed in. On June 18 the field was planted with a two-row planter, spacing the rows three feet apart. The plants were at eight inch intervals in the row.

AFTER CULTIVATING THE CORN three times it was harvested on September 16, although it was not as mature as it should have been to make the best silage. Twenty-nine feet of the row was cut and weighed, the stage of maturity observed, the ears removed and weighed, the green weight per acre calculated, the dry weight per acre calculated, and the weight of ears per acre calculated. The following percentages were used to calculate dry weight from green. If the corn was in the late milk stage it was assumed that the dry weight was 25% of the green weight; if in the early milk stage it was assumed that the dry weight was 20% of the green weight. This data was obtained through the County Agent from a summary of several Agricultural Experimental Stations.

	Wt. of 1/500 A.	Wt. of 1 Acre	LM
Improved Leaming	111	55,500	25% LM
Canada Leaming	76.3	38,250	25% EM
Burr Leaming	111	55,000	20% EM
Lancaster Sure Crop	110	55,000	20% EM
West Branch Sweep- stakes	84	42,000	20% LM

	Ears D. M.	Ears 1/500 per Acre	Ears per Acre
--	---------------	---------------------------	---------------------

Improved Leaming	13,875	25	12,500
Canada Leaming	9,500	22	11,000
Burr Leaming	11,100	26	13,000
Lancaster Sure Crop	11,000	24	12,000
West Branch Sweep- stakes	8,400	12	6,000



Malcolm Spalding

HERE IS THE TEAM THAT DID IT

Walter Lewis Chester Dunn Instructor J. E. Eastwood

Essex Dairy Judging Team Features at Springfield

Effort and skill had their reward at the Eastern States Exposition on September 25, when the dairy-judging team representing Essex County Agricultural School, schooled by Instructor J. E. Eastwood, was placed first, with the added honor of scoring first, second and sixth individuals. The team included Walter Lewis, '31, of Andover; Chester Dunn, '32, of Rowley, and Malcolm Spalding, '32, of Newburyport.

Student Lewis is to be awarded a gold watch for placing as highest individual. Chester Dunn, as second high individual scorer, will have for his reward, a gold medal. Nor is it to be forgotten that Malcolm Spalding, third member of the team, was placed sixth in the individual list.

Instructor Eastwood is to be congratulated for his interest and help to the boys who have won these honors.

Events of Rabbit Breeders' Association

November 19—F. H. Branch on Cost Account Records.
December 17—V. A. Rice with heredscope on Principles of Breeding.
January 21—Table Show.
February 18—Speaker from Harvard: G. Swain.

350 Bushels of Potatoes From An Acre

The following are the field notes on an 88-bushel crop of marketable potatoes from one-quarter of an acre.

VARIETY: Green Mountain seed from Aroostook County, Maine.

HOW TREATED: Two ounces of corrosive sublimate to fifteen gallons of water for one and one-half hours before cutting.

HOW CUT: Two eyes to the seed piece (about one and one-half ounces each).

LAND PREPARED, How: Plowed, thoroughly dis-harrowed and furrowed out with horse-hoe.

HOW FERTILIZED: Four hundred pounds of 5-8-7 fertilizer (sixteen hundred pounds to the acre) spread in the furrow and stirred.

HOW HEAVILY PLANTED: Four and one-third bushels (seventeen bushels to the acre). Seed pieces about eighteen inches apart in rows two feet ten inches apart. Covered about four inches deep by horse-hoe.

DATE PLANTED: May 18, 1931.

WEEDS CONTROLLED, How: Harrowed with spike-tooth harrow on June 2d. Cultivated three times during the season to kill weeds.

PESTS CONTROLLED, How: Sprayed with Bordeaux Mixture and Arsenate of Lead by orchard power sprayer four times at approximately two-week intervals, beginning June 18.

DATE HARVESTED: September 22.

YIELD: Eighty-eight bushels of marketable potatoes and six bushels of cull potatoes.

CONDITION: Exceptionally large potatoes practically free from scab, rots, etc.

The potatoes were grown as a cash crop at the Essex County Agricultural School in a strawberry bed rotation. After the crop of strawberries was harvested in 1930, buckwheat was sown as a green manure crop. When in full bloom the buckwheat was plowed under and rape sown as a winter cover crop. No animal manure has been used on this land for many years.

—C. M. Wood.

Essex Farmer and Homemaker

HATHORNE, MASS.

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CALENDAR

- Oct. 21—First meeting of Essex County Poultry Association at the School.
Nov. 6—Science Day at the School.
Nov. 13-14—Vocational Agricultural Judging at Massachusetts State College.
Nov. 20—Fall term in agricultural department closes.
Nov. 23—Second term opens.
Nov. 24—Graduation date for home-making and agricultural departments.

Editorial

With an average September enrollment of fifty new students in the agricultural department, this year's total of eighty-seven stands out as the largest in number and greatest in quality the School has ever known. Each year, students entering vocational schools seem more alert to the fact that a career, and especially one that is beneficial to the greatest number, is as desirable as it is necessary for creating and maintaining balance in living.

This year, particularly, both agricultural and homemaking students are aware of the fact. Both departments total 135 new entrants, representing twenty-nine towns in Essex County. Peabody heads the list with fourteen. Andover and Lynn come next with thirteen. Danvers follows with eleven. Lawrence and Haverhill send ten and Salem eight. The other towns represented are: Middleton, Beverly, Salisbury, Marblehead, Rowley, Cliftondale, Nahant, Newburyport, Gloucester, Topsfield, East Lynn, Beverly Farms, Saugus, Georgetown, North Andover, Methuen, Swampscott, Amesbury, Rockport, Lynnfield, Ryfield, and Ipswich.

Graduation, Nov. 24th

Alumni Notes

C. Raymond Poor, class of 1918, visited the School in September, shortly after a return from Long Beach, California, where he has been making his home for the past several years. His present address is 21 Roosevelt Avenue, Beverly, Mass.

Frederick Bragdon, '27, is employed at the Chebacco Nursery in Essex. He and Mrs. Bragdon are to be congratulated on the birth of a daughter, Adelaide, on April 1, 1931.

Jack Sturtevant, '30, is gardener on a private estate in Lynnfield Center. Eva Belcher, '31, is in training at the Massachusetts General Hospital in Boston.

Bessie Manchester, '31, is employed as dietitian at the Odd Fellows Home in Groton, Connecticut.

Julia Bruce and Mary Hammond both of the class of '31, have returned to act as laboratory assistants in the Homemaking department.

ATTENTION ALUMNI ANNUAL BANQUET AND DANCE

November 24, 1931

Business Meeting
5.30 P. M.

Tenth and Fifteenth Reunion
Classes of '21 and '16

Future Farmer Jottings

Inasmuch as R. Hugh Conn, Future Farmer member of the Worcester North High School, entered the Public Speaking Contest held here last August, it seems timely and fitting to extend to him our congratulations on his recent victory at the Eastern States Exposition Public Speaking Contest.

Student Conn has been active during his school career, holding presidency of the Future Farmers, the Demosthenes Club (a law club), and the Dramatic Club, in addition to the managership of the High School Record. He made a special study of the Tariff and the Debenture Clause in the winter of 1931 and is well schooled in that subject which has brought him three victories in public speaking. Student Conn will next compete in the second annual national F. F. A. Public Speaking Contest, to be held at Kansas City, Missouri, in November.

Football Factors

The School's football season opened with two scrimmages, October 2nd and 6th, with Beverly and St. John's Prep. On October 8, the first game was a scoreless tie with St. John's Prep. A victorious game was played at Somersworth, N. H., on October 17,

News of the School at a Glance

October 6

The fourth annual Poultry Unit Course started on the evening of the sixth, supervised by Instructor J. S. Bennett. Since then meetings have been held twice a week, every week, on Tuesdays and Thursdays.

October 8

Chief Joseph E. Kelley, of the Danvers Fire Department, marked Fire Prevention Week with an address at the School on the subjects of elimination of fire causes and the care which should be used in making known to the fire department the vicinity of a fire already broken out.

October 13

Miss Moore, Educational Manager of the Homemaking Department, and her staff greeted the parents and friends of the homemaking girls, inviting them to attend classes as they are held according to daily schedule. At 3.30 punch and wafers were served by the girls. The department will be at Home again on October 27 to those mothers and friends who were unable to attend last week.

October 14

Horace J. Shute, County Club Leader, organized a new 4-H Club group with 50 students of the School applying for membership. Their work will be carried on as an activity outside the regular School curriculum.

October 15

The students were most fortunate in having as their guest speaker for the first joint-assembly of the year, Rev. Thomas Burns, Rector of the Grace Methodist Episcopal Church in St. Johnsbury, Vt. Reverend Burns' subject of "Where Are We Going," was significantly adapted to a group of young people whose challenge it is to do greater things and be greater people by getting what they want—and wanting the thing that is right.

Nuptials

Miss Mary Elizabeth Swett to Mr. Charles Gardner Caverly ('22), October 10, 1931. At home after November 1, High Street, Ipswich, Mass.

Miss Florence Mae Kirker to Mr. Robert Lufkin Moulton ('29), September 30, 1931. Present address, Forest Street, Lynnfield Center, Mass.

Essex scoring 10 to Somersworth's 0.

Following is the schedule for remaining games, all to be played away from the School: October 20, Lynn General Electric Apprentice School; October 24, Newburyport; October 31, Wakefield; November 7, Beverly; November 11, Sanborn Seminary, Haverhill; November 13, Boston University Freshmen; November 21, Marblehead.



The Blue and White Sign

The roadside stand for the sale of vegetables and other products of the farm has come to stay. Properly conducted, it fills a want that is real, and does it conveniently and well. But it must be kept "up to scratch," and this the organization effected by Dr. A. W. Gilbert, Massachusetts commissioner of agriculture, sets out to do.

The market by the side of the road provides the farmer an opportunity to sell to the great automobile traffic, fruits, vegetables, dairy products and poultry. But these articles must be fresh and of fine grade, or the benefits to the buyer are lost. To insure those qualities, the State Department of Agriculture has devised an official shield to be given approved stands, so that the purchaser, when he sees it displayed, may buy with an easy mind. It is a large blue shield bearing the words, "Bay State Farm Products." These are the terms under which it is leased to the owner of the stand:

The major portion of his products must be produced on his own farm or nearby farm.

Farm products not produced on his own farm or neighboring farms shall be conspicuously labelled, so that the purchaser may know that these products were not locally produced.

All farm products shall be so packed that the face or shown surface shall represent the contents of the package.

Parking space shall be sufficient to prevent using the highway for parking and no markets shall be located amid unsightly or unhealthful surroundings.

No labels or signs shall be in any way false or misleading.

The roadside market shall be clean and neat.

All products shall be of good quality and fresh.

—From "The Boston Post."

Unit Course in Dairying

A Unit Course in clean milk production and milk testing, under the supervision of Instructor J. E. Eastwood, will start at the School on Wednesday evening, October 21, at 7.30. A class will also be conducted on Friday nights if sufficient applicants desire to take the course. Those interested should immediately notify Director F. A. Smith.

Rats

Joining with the witches and goblins in their annual celebration on Halloween this year will be myriads of dead rats, if the plans of E. M. Mills, rodent control specialist of the federal government, are carried out.

In the state-wide campaign against rats, which is being conducted under the direction of Mr. Mills, baits made of meat, fish and cereal, and doped with red squill, are being manufactured in large quantities and sold below cost. The county extension services are agencies for these special baits and are taking orders until October 24. On October 30 the baits will be distributed in practically every town in the state. Following is a list of the distributors in Essex County:

Amesbury, Smith Grain Company; Andover, John Shea; Beverly, George Collinge; Danvers, Ropes Grain Company; Parker Grain Company; Essex, N. M. Quint; Georgetown and Ipswich, E. H. Yeaton; Groveland, W. H. Dewhurst; Gloucester, D. H. Hodgkins Company; Hamilton, Hamilton Hardware; Haverhill, Ellison Coal Company; J. H. Smith Company, Whittier School Bldg.; Ipswich and Rowley, George Brown; Lawrence, John Shea, J. Brockman; Lynn, Torrance, Vary Company; J. W. Day Company; Lynnfield, J. M. Roundy; Manchester, D. H. Hodgkins Company; Marblehead, Arthur Summer Drug Company; Methuen, John Shea; Middleton and Haverhill, Essex Agricultural School; Newburyport, Knight Grain Company; Cushing Grain Company, W. E. Atkinson; No. Andover, John Shea, Marblehead Grain Company; Peabody, M. W. Ellis; Rockport, Savage News Agency; Saugus, Whitford & Brown, Melrose; Topsfield, Essex Co-operative Farming Association; Wenham, W. F. Trowt; West Newbury, Bailey's Grocery; Merrimac, Davis Drug Company; Salem Depot, N. H., Kimball Grain Company.

It is interesting to note that Ida May Perkins, a graduate of November, 1930, assisted in arranging the White and Johnson garden exhibit which was awarded a second prize at the Topsfield Fair.

Storage of Vegetables and Fruit

The storage of vegetables and fruit will prove very economical for many families this coming winter. The families who have small gardens or small quantities of fruit should store away portions of their crops for winter needs.

The root group, beets, carrots, parsnips and turnips, can be stored away on a dirt or cement floor in a far corner from the cellar heater and covered with moist sand or loam from the garden. Leave a small opening in the top of the pile or insert a little grass to allow the stagnant air to escape from the pile. This should take care of the small family needs. If larger quantities than would be advisable for the cellar are to be stored, the roots could be piled up in the back yard and covered with a layer of two or three inches of hay and several inches of soil over the pile to prevent drying out. As severity of weather approaches, apply more soil or manure to prevent freezing. Allow for ventilation by letting hay stick out of the top or flue.

POTATOES

can be stored in the cellar, in bins or barrels, or left in bags. They could be stored in a manner similar to the other roots before mentioned. The root group requires a cool, moist atmosphere, as does cabbage. Cabbages can be hung from the ceiling in the cellar or stored in racks in the far corner of the house or barn cellar.

Onions want a dry, cool storage place, as does squash. Squash placed around the chimney in an open attic would be stored in a desirable way. Apples need a cool, moist temperature and conditions similar to the root group.

—C. M. STEARNS.

High Scoring Vegetable Judges at Worcester

Members of the Essex Aggie vegetable-judging team well deserve the honor which is theirs in winning a banner, which is to be awarded later, for placing first at the New England Fair held at Worcester. Nine teams, including seventy individuals, contested. The Essex total score was 2,005.

The team, coached under the personal direction of Instructor C. M. Stearns, consisted of Ralph Broughton, '34, of Peabody; Theodore Frieswyk, '34, of Saugus; and Jack Wong, '33, of Salem.

Clothes Institute Creates Interest

A large group attended the first meeting of the Fall class in Clothes Renovation, a course given by Mrs. Esther Cooley Page, State clothing specialist of Massachusetts State College.

Eager interest was shown when Mrs. Page, after a careful examination of the garments brought for renovation, gave ingenious suggestions which required in most cases extremely little work in proportion to the satisfaction one would get when her frock or coat was remodelled "a la mode."

The class started at ten o'clock and lasted through the afternoon, with an hour for lunch at 12. The lecture and demonstration comprised the actual discussion of garments brought by women, and definite, practical advice as to the best way of re-making them.

At the next meeting, continuation will be made of the remodelling of clothing which was made ready last time for the first stages.

Gardening Lecture by Prof. A. M. Davis

Announcement is being made of an illustrated lecture to be given Thursday, October 22, in West Boxford, on "Fall Gardening for Winter and Spring Flowers." This is to be the first of a series of lectures on timely Home Grounds subjects, given by Professor A. M. Davis, specialist in Home Ground Improvements, of Massachusetts State College.

The meetings, sponsored by the Women's Department of the County Extension Service, will be held in the West Boxford Community House at 2.30 P. M. o'clock. All women interested are cordially invited to attend.

Further information may be obtained from Mrs. Alexander Price, community chairman, West Boxford.

School Lunch Box

The first of two meetings of the School Lunch Box Project, as sponsored by the Women's Extension Service in Essex County, was conducted in the Middleton Town Hall, Friday afternoon, by Miss Marion P. Crawford, Home Demonstration Agent.

An outline of the points of good nutrition, and types of food, including foods for soft and hard tissues, and energy and heat creators, were carefully discussed, as were rules for regulating diets and school lunches for children.

Suggestions for sandwich bread, fillings, and the final appearance of

(continued to Col. 3, page 4)

SAVE THESE DATES

Oct. 27	Demonstrations on LOW COST MEALS by MAY E. FOLEY Nutrition Specialist	Oct. 28
Danvers	Maple Street Church	Oct. 27
South Lynnfield	Community Church	Oct. 28

Annual Meeting of Advisory Council

The Advisory Council of the Women's Extension Council held their first all-day meeting of the season at the Essex County Agricultural School on Tuesday, with Miss Marion P. Crawford, Home Demonstration Agent and her assistants, Mrs. Mary McIntyre and Mrs. Mary Roundy, acting as hostesses.

Each member of the council reported on the Extension work carried on in her particular district. Miss Crawford and her assistants revealed that Extension courses are being carried on in 20 towns in this county, and that 110 women have been carrying projects in organized groups this past month.

The following council members were elected for the coming year's offices: Mrs. Earl Bessom, Marblehead, chairman; Mrs. Harold Peabody, Lynnfield Center, vice-chairman; and Miss Marion Parker, Beverly, secretary.

Members then voted that a Constitution for the Advisory Council be drawn up by a committee of women representing the advisory council, the community committee, a project leader and a member in Extension work at large. Miss Marion Parker was elected to represent the advisory council. Other representatives were appointed: Mrs. N. D. Herrick, South Lynnfield; Mrs. Raymond Cooper, West Andover; and Mrs. C. S. Wright, Danvers.

Miss Verna Payson, of the State Department of Vocational Education, a guest of the council, closed the meeting with a brief discussion of vocational classes for women.

Members of the Advisory Council are: Mrs. Harold Peabody, Lynnfield Center; Mrs. Harold Knapp, Newbury; Mrs. H. K. Richardson, Middleton; Mrs. E. Robert Little, Topsfield; Mrs. Franklin Robblee, Salisbury; Mrs. Earl Bessom, Marblehead; Mrs. George Mitchell, Groveland; Miss Marion Parker, Beverly; Mrs. John Goodhue, Ipswich; Mrs. Fred O. Kilham, Hamilton.

Meeting of 4-H Local Leaders

The second annual meeting of the Essex County 4-H Local Leaders' Association will be held Friday afternoon and evening, November 6, starting at 4 P. M., in the homemaking building of the Essex County Agricultural School. A special program will be presented for the purpose of solving leadership problems. Supper will be served at 6 o'clock. All local leaders are requested to be present.

—H. J. SHUTE, County Club Leader.

Questions and Answers

Prepared by MAY E. FOLEY,
Extension Nutritionist

Question: We hear a good deal about cod liver oil for children. I always thought cod liver oil was a medicine.

Answer: Pure cod liver oil is a food and not a medicine, and many mothers now give it not only to babies but to older children as well.

Question: At what age would you begin with a baby?

Answer: At three weeks of age begin with 6 to 8 drops on a teaspoon, gradually increasing the amount until at six months of age the baby is getting two teaspoons, and at nine months 3 teaspoons daily.

Question: Will the baby like it?

Answer: Some babies spit it out at first, probably not because they particularly dislike it, as young babies have very little sense of taste, but because the texture is new. Most babies learn to like it in a short time.

Question: What is the value of cod liver oil for babies?

Answer: It builds bones and teeth, prevents rickets, and helps prevent colds and other lung and throat infections by building up the baby's resistance.

Question: Does it take the place of sunshine?

Answer: To a certain extent it does take the place of sunshine in the winter months. The winter sunshine in this northern climate is very low in ultra-violet rays, and the vitamin D in cod liver oil helps do the same thing for our bodies that ultra-violet rays do.

sandwiches were made and the art of sandwich-making demonstrated. At the close of the meeting these were sampled and their value and delicacy proved.

Eight mothers attended the project. It is expected that the second demonstration, to be held on Friday, October 23, will draw an increased attendance.

ESSEX FARMER AND HOMEMAKER

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Graduation

Trustee R. S. Bauer will award sixty diplomas and certificates to this year's graduating students at the sixteenth annual graduation exercises, to be held at the Peabody Institute, Danvers, on Tuesday, November 24, at 2 P. M.

Rev. Ralph A. Sherwood of Salem promises an inspirational address on "Graduation and the Future."

Miss Elinor Bacon of Andover, valedictorian, will precede her valedictory address with a talk on "Personality of Color," a subject in which she has delved with especial interest during her course in the Homemaking School.

Woodbury Bartlett of Beverly will precede the salutatory address with a talk on his experiences in floriculture.

Following is a list of the candidates for graduation:

Woodbury Bartlett, Beverly; Merritt C. Blake, Peabody; Harold D. Bowen, Ipswich; Bernard W. Brown, Saugus; Norman A. Coleville, Lynn; Charles W. Cook, Saugus; Henry P. Cryan, Swampscott; Otis E. Curtis, Jr., Gloucester; John E. Ellis, Peabody; Maurice F. Foley, Rockport; Harry S. Green, Rockport; Kenwood M. Griffin, Rockport; Nathaniel C. Hart, Lawrence; John F. MacKenzie, Wakefield; John V. McNair, Gloucester; Ralph E. Noyes, West Newbury; Thomas J. O'Shea, Salem; Roland F. Shiers, Andover; Saul Shtrumpfman, Andover; Bradford Silsby, Bradford; Robert Waters, Beverly; Bradford E. Webb, Andover; Lawrence O. Westcott, Melrose; David Fisher, Saugus, and Elbridge F. Gerry, 2nd, Lynnfield Center.

Candidates for diplomas in the Homemaking Department (three-year group):

Elinor V. Bacon, Andover; Emily K. Bailey, Cliftondale; Alice L. Berry, Cliftondale; Helen A. Bozek, Peabody; Esther C. Browne, Lynn; Madelyn F. Darling, Beverly; Ruth Frost, North Andover; Marjorie M. Griffin, Rockport; Mary E. Higgins, Salem; Doris I. Howard, Danvers; Viola A. McCabe, Lawrence; Bessie M. Man-

(Continued on page 3)

Hartwell Reid

The story of Hartwell Reid might be entitled, "The Man Who Came Back."



HARTWELL REID

Attending this School for three years as a student, from 1913-1916, he returned after eleven years, in 1927, to register in the Unit Poultry Course under Mr. Albert Doolittle.

Starting with a small flock (73) of Rhode Island Reds, he has since bought a farm and developed an establishment that boasts of 600 Barred Rock breeders. Within the year Mr. Reid has added a Jamesway incubator to his equipment, and in this his first year in the baby chick business has been unable to supply the demand for quality chicks. He is optimistic about expansion in this direction and has plans well formulated for increasing his incubator capacity, introducing hot water brooding, and putting a south wing on his laying house which will bring his capacity up to 1,000 birds.

Here is an example showing that the poultry industry has proved a means of making a living and supporting a family happily and comfortably.

Basketball Data

Coach Philip H. Coughig announces the following basketball schedule:

January 6, Alumni; January 20, Haverhill; January 22, Bristol; January 29, Norfolk; February 3, Gloucester; February 6, Beverly.

Student David Carter of Gloucester is manager of the team.

Science Day

The seventh annual Science Day, originated by Franklin E. Heald, Supervisor of Agricultural Education in Massachusetts, was observed Friday, November 6, in the agricultural assembly hall.

Mr. Frederick Bliss, of the Educational Division of the General Electric Company in Boston, was the main speaker of the afternoon. His lecture rose from facts generally scientific to a demonstration with slides and actual appliances of electrical exhibits. A fitting reel, showing Thomas Edison inspecting the General Electric plants, concluded Mr. Bliss's part in the program.

Immediately following this address, awards for the science day exhibits were presented by Director F. A. Smith.

To the Seniors the following awards were made—1st ribbon: Sidney Batchelder of Andover, for his exhibit of mounted wild flowers; 2nd ribbon: Edith Cook of Manchester, for wild flowers; 3rd ribbons: Elaine Pingree of Haverhill, for mounted flowers, and Pauline Ramsey, Haverhill, for a leaf exhibit.

To the Juniors were awarded—1st ribbon: Fred Anderson of Beverly, for a poultry collection including feeds, feathers and eggs; 2nd ribbon: Nathan Clark of Swampscott, for leaves.

To the Sophomores—1st ribbon: Virginia Larrabee of Beverly for a collection of weeds, leaves, and dish gardens; 2nd ribbon: Dora Winchester of Saugus, for commercial feeds with analyses; 3rd ribbon: Frank Bond of Saugus, for an exhibit of rocks, minerals and insects.

To the Freshmen—1st ribbon: Leonard LeBell and Ralph Demuth, both of Lynn, for their co-exhibit of stones, minerals, and insect remains; 2nd ribbon: Francis Sparks of Andover, for his wood collection; 3rd ribbon: Nicky Fiory of Swampscott, for his leaf exhibit.

First, second, and third Sweepstakes Medals were awarded to Sidney Batchelder, Edith Cook, and Fred Anderson, respectively.

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CALENDAR

- November 13—Homemaking fall term closes—Agricultural Department.
November 18-20—Poultry Breeding School at Amherst.
November 23—Second term in agricultural department opens.
November 24—Graduation.
November 24—Alumni reunion and reunion of classes '16 and '21; Banquet and dance.
November 25-29—School recess.
December 19—Christmas vacation.

Class of 1931

On November 24 another good class passes from the standing of student to that of graduate. This is a part of the regular and ordinary experience in life, and yet it is surrounded with much of hope and sentiment to the individual. It carries also a feeling of satisfaction and gratification on the part of the teachers and other persons who have been involved in the course of training. Please feel that we shall have the greatest pride and satisfaction in your success and progress in your career.

Alumni

One of the greatest events and one which means much to the prosperity of the School is a large loyal Alumni body. In this respect this School is greatly favored. We note now the return of two classes, the class of 1916 and the class of 1921, as a part of the grand reunion. It is hoped that every graduate of the School, if even at something of a personal sacrifice, will make an earnest effort to return on Tuesday evening, November 24, and participate in the events which the Alumni officers have organized and arranged. Let us all open the Thanksgiving and holiday season by participating in the "home-coming."

Alumni Notes

James Skinner, '23, recently doubled the size of the lot in his Marblehead florist establishment.

Bernice Harvey, '31, is in training at the Lawrence General Hospital.

Helen Bozek and Mary Higgins, both of the class of '31, are employed in the foods department of the Salem Hospital.

Viola McCabe and Mildred Roberts, '31, are household assistants in Danvers homes.

Clifford Bruyer, class of '30, is employed in the landscape department of the R. J. Farquhar Company, at their new location on Broad Street, Boston.

Rose Noonan, class of '31, is training at the Faulkner Hospital, Boston.

The following graduates of the class of '31 are employed as household assistants: Ruth Frost, Lawrence; Edith Wilson, Shawshen; Angeline Jennicks, Beverly; Catherine McNamee, Beverly; and Mary O'Connor, Shawshen.

Alyce Sayles, '31, is attending Hampton Institute, Hampton, Virginia.

Veronica Marquis, '31, is in training at St. John's Hospital, Lowell.

John Hennessey, '21, is employed by the Bay State Nurseries in Framingham.

New Faculty Members for 1931-32

Mr. Carlton O. Cartwright, M. S. C. '28, and a graduate of Smith's Agricultural School, is teaching at this School in the departments of fruit growing, mathematics, and applied science. After graduation from college he was retained as laboratory assistant and an instructor in the department of horticultural manufactures at the College. He left this position to become an expert processor in a commercial fruit juice packing establishment.

Mr. Harold C. Stevens, a graduate of this School in 1918, is serving here as part-time instructor in ornamental horticulture. For several years he has been gardener in the Ropes Memorial at Salem. He has also served as garden supervisor for the city of Salem, and has been very active in preparing nature and gardening articles for the local press.

Another graduate of the School, in 1923, is Alton G. Perkins. Upon completion of his college course he has been elected to the staff of this School to teach science and English.

Mr. Oscar E. Mingo, a farmer-instructor at the Reading High School, comes here to assist in teaching Farm Mechanics.

News of the School at a Glance

October 19

The Seniors were the favorites in an interclass track meet, totalling 29 points to the Juniors' 19 and the Sophomores' 13. The sports participated in were a 100-yard relay, hurdling, running broad jump, chinning, running high jump, shot put, and standing hop, skip and jump.

October 23

The Senior fruit and poultry classes visited, with their instructors, the Sunnybank Poultry Farm, Littleton, The Nashoba Apple Packing Association in Ayer, The Pine Crest Orchards and Poultry Farm, and the Scott Poultry Farm, both in Groton.

The Annual Boston Market trip was made by the entire Junior class with the co-operation of the Division of Markets, the State House, Boston, and the U. S. D. A. Bureau of Agriculture and Economics. Starting at 4.30 A. M. the boys visited markets around Dock Square, the Boston Flower Exchange, the Boston Market Terminal Company, the Fruit Auction, a wholesale potato market, H. P. Hood's milk plant, the Thorndike & Gerrish Company, Batchelder, Snyder, Dorr & Doe Company, and the Eastern Avenue Cold Storage House of the Quincy Market Cold Storage Company.

October 27

The following class officers were elected: Senior class—President, William Chase, Rowley; Vice-President, Kathryn Ingoldsbys, Salem; Secretary, Betty O'Brien, Salem; Treasurer, William Costley, Lynn; Assistant Treasurer, Kathryn Kolhonen, Peabody; Auditor, Mary Kennedy, Peabody. Junior class—President, Robert Bartlett, Beverly; Vice-President, Pauline Bozek, Salem; Secretary, Dorothy Williams, Salem; Treasurer, Florence MacKenzie, Middleton; Auditor, Robert Griffin, Saugus. Sophomore class—President, Ralph Broughton, Peabody; Vice-President, Sidney Porter, Beverly; Secretary, Lucille Legasse, Haverhill; Treasurer, Alexander Dion, Salem; Auditor, James Smith, Andover. Freshman class—President, Clarence Patterson, Peabody; Vice-President, Leo Poisson, Andover; Secretary, Francis Sparks, Andover; Treasurer, William Daly, Peabody; Auditor, Francis Donovan, North Andover.

NUPTIALS

Miss Corinne Augusta Crowell ('31) to Mr. Gerald Cameron Goudy, on Wednesday, November 11. At home after November 16, in Lowell.

BIRTHS

A son, Charles Edward, born Saturday, October 31, to Mrs. Franklin Pike (Dorothy Rogers, '30).

Prizes—For Quality Potatoes

The first annual potato show will be held in connection with the Fourteenth Union Agricultural Meeting at Worcester, January 6, 7 and 8, 1932.

Prizes of \$8, \$6, and \$4, will be offered for the best 100-pound bag of potatoes, and \$5, \$4, and \$3 for the best single bushel box (Massachusetts Standard Box to be used). Ribbons will be awarded in each class.

Note—All who intend to exhibit, kindly notify A. W. Lombard, Manager, Union Agricultural Meeting, 136 State House, Boston, on or before Tuesday, January 5, in order that ample provision may be made to take care of all entries.

Public Speaking

Students in the agricultural department have signed up and are spending time on the Public Speaking Contest sponsored each year by the Future Farmers. The school elimination contest is to be held in December, the winners of which will be intensively trained to enter the county contest.

Following is a list of students trying out for the school contest. The starred names represent boys who were candidates last year: Milton Snow, *Clarence Patterson, George Lambert, *Hyman Weinstein, Virginia Larrabee, Chester Ellis, Ralph Doiron, Bertram Jackson, Walter Lewis, Kenneth Sprague, Harold Therling, *Alvin Courant, Lucille Legasse, and Theron Johnson.

Mementoes

The second lesson in the poultry breeding school, conducted by Prof. W. C. Monahan, Extension Specialist, will be held at this School on Tuesday evening, December 1st, at eight o'clock.

Members of the Massachusetts Fruit Growers' Association are requested to note that a class for new varieties will be open at the Apple Show held in connection with the Annual Meeting of the Association. The dates are January 6, 7, and 8, 1932. Liberal prizes will be awarded, and as usual, bushel classes for Baldwin, McIntosh, Delicious (Red), Northern Spy; 49 classes for Baldwin, McIntosh, Delicious (Red), Northern Spy; and plate classes for Baldwin, McIntosh, Delicious (Red), Northern Spy, R. 1, Greening, Cortland, Rome Beauty, Stayman Winesap, Wagener, and Roxbury Russet will be open.

November 10

An Armistice Day program was observed by both departments during their regular daily assembly periods.

A \$100 award is offered for the arrest and conviction of chicken thieves stealing from members of the Essex County Poultry Association. At the annual banquet and business meeting of the Association, Captain Beaupré of the State Constabulary assured all members that the Association has the co-operation of state police.

Final Report of Rat-Bait Sales in Essex County

An increase of thirty-three per cent over last year's sale of baits for the rat control campaign brought the orders for 1931 up to 1,104 in Essex County.

Orders for at least 100 more baits came in too late.

It is hoped that reports of the results discovered by purchasers will be sent in to the County Agent, F. C. Smith, that a county-wide check-up may be made.

"Cranberries are the only crop produced in Massachusetts in excess of the demand, according to data on the food production and consumption in the state assembled by the State Industrial Commission. The records show that thirty-three times as many cranberries are grown here as are eaten annually within the state. This is partly due to low consumption of cranberries as compared with other sections of the country. It appears that the seven per cent of the population of the country living within New England eat only a little more than two per cent of the cranberries grown in the country, in spite of the fact that more than two-thirds of all the cranberries raised in the United States are grown in Massachusetts."

(Continued from page 1, col. 1)

Chester, North Andover: Elizabeth K. Marsh, Middleton; Adelaide H. O'Brien, Saugus; Mildred J. Roberts, Saugus; Edith E. Wilson, Methuen.

Candidates for Certificates in Home-making Department (Post Graduate group):

Julia A. Bruce, Lynn; Kathleen Connelly, North Andover; Helen L. Curtis, Cliftondale; Veronica D. Marquis, Lawrence; Isabelle W. Murray, Cliftondale.

Candidates for Certificates (High School Special Group):

Margaret E. Ahern, Salem; Eva M. Belcher, Hathorne; Ruth T. Bresnahan, Salem; Corinne A. Crowell, Methuen; Barbara C. Freeman, Salem; Mary E. Hammond, Lawrence; Bernice A. Harvey, Lawrence; Angeline J. Jennicks, Salem; Catherine M. McNamee, Salem; Rose Noonan, Salem; Mary R. O'Connor, Lawrence; Amy Ramsbotham, Methuen; Alyce V. Sayles, Andover; Jean B. Stowell, Methuen.

Annual Alumni Reunion

Honoree J. Shute, Secretary of the Alumni Association, has planned, with other officers, a reunion for the graduating class and alumni of '21 and '16, which will probably attract every able member of these classes to the School on Tuesday Evening, November 24. Treading on toes will be forgiven if done smilingly.

Highlights of the reunion include: A banquet at 6.30 in the agricultural building assembly hall (please note), and by banquet is meant "banquet," with a banquet speaker whom you're all bound to like. One dollar only (includes speaker).

A dance at 8.30—to Shep Wolan's Orchestra of Salem. Tune in for his announcements Sunday afternoons over WJDD.

A business meeting at 5.30. Don't forget to remember.

Fruit Talk

It is wise to look with foresight into all things. The prudent fruit man will forward his undertakings by taking inventory of his orchard equipment now, thus enabling him to make necessary orders for spring in January and February when inclemency of weather prevents working outside.

In checking up spraying materials on hand, it is possible that empty barrels or kegs may be found, for which a refund is generally offered by concerns from which the chemicals were purchased.

Especial care should be taken in storing spraying chemicals properly. If not handled correctly they may be spoiled by weather conditions or through leakage.

It is also expedient to put carefully under cover all orchard equipment and to make repairs which will be necessary before they are again to be used. This may mean the difference between success and failure.

Farm Facts

"There is practically no difference between a pumpkin and a squash, but the squash usually has a round stem while that of the pumpkin is five-sided.

More than 8,000 varieties of apples have been identified, described, and named. Seven thousand of these are red in color.

Scientists have found that when orange trees are sprayed with arsenate of lead, which is an insect poison, the oranges have less acid and also less Vitamin C.

Some plant diseases are caused by viruses, organisms so small that they have never been seen, even with the most powerful microscopes."

Low Cost Meals

"Nourishing Meals at a Smaller Cost," was the subject chosen by May E. Foley, Extension Nutritionist, to discuss at meetings held in Danvers and South Lynnfield in October. 124 women, from 18 communities, were present.

Miss Foley stressed primarily the necessity of intelligent purchasing of foods, so that money spent might have a relation to the nutritive value secured.

As an example of a limited diet providing the necessary foods, the lecturer included milk, whole wheat, eggs or lean meat, cabbage and tomatoes. In the case of large families where milk is to be provided in large quantities, it is more economical to use unsweetened evaporated milk, which costs less than fresh but is still nutritious.

A few of the outstanding ways of reducing the food bill mentioned by Miss Foley were:

1. Teach the family to eat whole-some foods. Allow no discussion of food likes and dislikes.
2. Plan meals carefully.
3. Buy in quantity, if there are storage facilities, those foods which are beneficial.
4. Use vegetables and fruits in season.
5. Use canned or raw tomatoes for oranges.
6. Use dried or canned fruits instead of fresh at least once a day.

During her lecture Miss Foley prepared dishes which would fit into nutritive and economical menus. A few of her recipes follow directly:

Vegetable and Beef Casserole

- 1 pound beef
- 2 medium carrots
- 2 medium onions
- 1 cup peas
- 3 medium potatoes
- 1 cup tomato or tomato soup

Seasonings.

Buy cheap cut of meat and cut in one-inch cubes. Roll in flour and brown in frying-pan with some beef suet. Add a little water, cover, and simmer for half hour. Place in casserole and add a layer of onion, carrot and potato thinly sliced or cubed. Add seasonings. Pour over strained tomato and juice from peas. Cover and cook 1 hour. Then add peas and cook for half hour longer. Serves six.

Cranberry and Apple Relish

- 1 cup ground raw cranberries; 1 cup ground raw apple (with skins); 1 cup sugar. Mix all together and let stand one hour.

Carrot Custard

- 1 egg
- 1/4 cup sugar
- 1/4 teaspoon nutmeg
- 1/4 teaspoon salt

- 1 cup cooked, or
- 1 1/2 cups grated raw carrot
- 1 tablespoon melted butter
- 1 cup milk

Beat the egg, add the other ingredients. Mix thoroughly and pour into a buttered baking dish. Set the dish in a pan of hot water and bake in a slow oven until mixture is firm.

Copies of the bulletin on Low Cost Meals will be sent on request, by Miss Marion P. Crawford, Hathorne.

Joint Extension Banquet

A banquet for officers of county-wide organizations, county advisory councils, 4-H leaders of local clubs, community committees, and town chairmen, will be held in the Home-making building of this School at 6.30 P. M. on Thursday, December 10.

Rev. Garfield Morgan of Lynn will address the guests with a talk on "The American Farmer of Tomorrow."

During the course of the evening, ten-minute reports will be given by each of the county agents, covering their work for the year 1931.

Miss Mary Pozzi, Assistant Home Economics Specialist of Amherst, will have charge of the recreational part of the program. Other representatives of the College and the State Department of Education will be present.

Home Nursing Classes Co-operate with State Department of Public Health

Women of the following communities have been attending classes with Mrs. Mary Roundy, Instructor in Home Nursing: Danvers, Andover and Marblehead.

The last meeting of each class was an open meeting, at which Dr. Lila Owen Burbank, of the State Department of Public Health, gave an instructive address on cancer control.

Round About the County

- November 23—Child Feeding, Swampscott.
- November 24—School Lunch Box, Groveland.
- November 27—Garment Making, Salisbury.
- December 1—New Clothes from Old, Saugus.
- December 3—New Clothes from Old, Ballardvale.
- December 4—Garment Making, Salisbury.
- December 8—New Clothes from Old, Lynnfield Center.
- December 9—Clothes Selection, Gloucester.
- December 10—Joint Extension Banquet, Essex County Agricultural School.
- December 11—Garment Making, Salisbury.

Clothes Lines

STRESSING COLOR, POSTURE, AND UNITY OF IDEA

On October 21, Mrs. Esther Cooley Page, State Clothing Specialist, discussed before forty members of the Gloucester Woman's Club and guests, the importance of color, posture, and unity of idea in lines of clothing for the modern costume.

With regard to color, Mrs. Page stated that contrasting values brighten one's countenance amazingly. Light and dark contrasts with bright touches are well suited to the person of medium complexion.

As for posture, "waistlines are in," and flat, straight backs are coveted possessions.

With slides to illustrate her high lights, Mrs. Page showed how good design has a lasting charm and beauty. Clothing which bears a relation to figure proportions by following the structural lines of the body rhythmically, as did the old Greek costumes, adds grace and beauty to one's general appearance. It is vastly important that one respect the laws of unity and proportion.

By choosing one's clothing thoughtlessly, one may give a sorrowful effect. With care and skill in clothes selection, one may accent an aspect of cheer.

Professor Davis Conducts First Meeting in Home Grounds Improvement

"Fall Gardening for Winter and Spring Flowers" was the subject of a talk by Professor A. M. Davis, Assistant Extension Horticulturalist, at West Boxford, October 22. Fifty-nine women attended the lecture, representing thirteen communities. A second meeting, to be held in January, will be announced more definitely later. We feel that this is a splendid undertaking for beautifying home grounds.

Garden Comment

"Tabbed evergreens on the terrace or at the entrance add a note of cheer and welcome through the dreary winter months. During the holiday season such a potted specimen may be decorated with colored lights to carry out the charming idea of a living Christmas tree."

"Don't burn the leaves. Those which are not needed as covering for plants can be placed in a pile to rot and form valuable plant food for the garden next year."

"Evergreens, especially newly planted ones, may be protected from sun-scald or strong winds by screens of burlap stretched on sticks."

—EDWARD W. REED,
Landscape Gardener, Nurscryman.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 12

HANTHORNE, MASS., DECEMBER, 1931

NO. 12

Prize Winners for 1931

On November twenty-fourth, at Graduation exercises, Director F. A. Smith presented the following awards: *The R. S. Bauer Awards for Excellence in Agricultural Projects:*

First—Dorral Berry, North Andover, \$20.00.

Second—Saul Shtrumpfman, Andover, \$10.00.

Third—George Lambert, West Boxford, \$10.00.

Fourth—Jack Schafer, Marblehead, \$5.00.

Fifth—Roland Wagner, Methuen, \$5.00.

The Mrs. R. S. Bauer Awards for Excellence in Homemaking Projects:

First—Elinor V. Bacon, Andover, \$20.00.

Second—Kathleen Connelly, North Andover, \$10.00.

Third—Marjorie Griffin, Rockport, \$10.00.

Fourth—Ruth Bresnahan, Salem, \$5.00.

Fifth—Ruth Frost, North Andover, \$5.00.

The Governor John Endecott Awards for Superior Projects in Horticulture:

First—Carl Swanson, Rockport, \$20.00.

Second—Everett Silva, Rockport, \$10.00.

Third—Woodbury Bartlett, Beverly, \$10.00.

Fourth—John Lynch, Andover, \$5.00.

Fifth—Harry Green, Rockport, \$5.00.

Alumni Association Awards for Greatest Improvement in Academic Work:

Homemaking—Ruth Frost, North Andover, \$5.00.

Agricultural—John MacKenzie, Wakefield, \$5.00.

Abraham Krasker Medals for Excellence in English:

Homemaking—Mary Higgins, Salem.

Agricultural—Harold Bowen, Ipswich.

Special Award for Excellence in Individual Project:

Bradford Webb, Andover, \$10.00.

Following are the committees who judged the various prize-winners:

The R. S. Bauer Awards: Mrs. R. L. Hodsdon, W. Gloucester; Mrs. J. A. Pitman, Salem; and Mrs. E. K. Hayden, Saugus.

The R. S. Bauer Awards: Mr. J. N. Dummer, Rowley; Mr. M. G. Grey, Wenham; and Mr. A. L. Pierce, Peabody.



FARM MECHANICS BUILDING

The John Endecott Awards: Mr. Robert H. Sawyer, Bradford; Mr. H. A. Harrington, Peabody; and Mr. Conrad Tronerud, Topsfield.

Construction of Farm Mechanics Building Underway

With the completion of a new farm mechanics building, the School will have increased in usefulness, not only in supplying a building in which all farm mechanics can be carried on, but in offering the added advantage of giving students experience in building construction. Mechanics instructors connected with this School have been supervising and assisting the mechanics students in the entire erection of this new farm shop.

The interior of the building will combine a carpenter shop, two class rooms, and instructors' offices, with a stock room on the first floor. Blacksmith and repair shops will be located in the basement.

When finished, the shop will be of buff color to match the cow barn built last year, with slate green roof. It faces west and lies parallel with the old homemaking building, setting back just twenty-five feet.

Producers and retailers of milk will be interested in a new bulletin on The Consumption of Milk and Dairy Products in Metropolitan Boston in December, 1930. Copies will be sent on request, by the Massachusetts Department of Agriculture State House, Boston, or the Massachusetts Agricultural Experiment Station, Amherst, Mass.

Steady Growth of 4-H Clubs

In Saugus, 4-H club work again gains a strong hold after many years of inactivity. Three food clubs and two clothing clubs held their first meetings early in December under the leadership of Miss Pearl Belonga, assisted by Mrs. Kenneth Odiorne, and Miss Anne Fox.

The County Club Agent, Horace J. Shute, states that "these clubs, along with many others, have made an excellent start and promise to make one of the most successful years in club history."

4-H Clubs

have made another advance in Essex, where five new clubs were recently organized under the guidance of Mrs. Helen Myers, assisted by the Misses Ruth Wriston and Eva Andrews. Mrs. Myers is resuming the local leadership which she held formerly when 4-H clubs were existing in Essex eight years ago. The new clubs include a membership of sixty-one boys and girls of the fifth, sixth, seventh, and eighth grades. They are enrolled in handicraft, clothing, foods, and poultry projects. A recent visit by the club agent revealed a sincere interest on the part of each member. The club as a whole has earned money to purchase tools, and a creditable workshop has been constructed in the basement of the school.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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CALENDAR

December 22—Poultry Judging School to be held at this School for 4-H members in preparation for the Boston Poultry Show.

December 28—Short Unit Graduation (Dairy and Poultry)

December 29-January 2—Boston Poultry Show.

January 4—Homemaking and Agricultural Departments open after Christmas vacation.

January 6, 7, 8—Union Agricultural Meetings at Worcester.

January 14—Farm Management Short Course—8 P. M. at the Essex County Agricultural School.

January 21—Table Show for Rabbit Breeders' Association at this School (unless otherwise announced).

Editorial

For the second time in a period of 18 years, death has removed a member of our staff. In the passing of Oscar E. Carlson, the School loses an earnest, enthusiastic instructor who will be remembered by many of the graduates and undergraduates who had contact with him during the four years of his connection with the School. His loss is severely felt by the staff who valued him because of his earnest, unassuming, frank, honest approach of everything connected with his work and life.

Births

A daughter, Carolyn Elizabeth, November 16, to Mr. and Mrs. Andrew W. Love. Mr. Love is an agricultural instructor in the Worcester North High School.

A baby girl, December 7, to Mr. and Mrs. Harrison Tenney of Rowley. Mrs. Tenney was formerly Isabel M. Bubier, of the class of 1930 in this School's homemaking department.

Amherst Contests

At the Interscholastic Judging Contest held this year at Amherst, Essex County Agricultural School is well worthy of the honor which is theirs in placing second in vegetable judging, and third in fruit contests. John Quinn, class of '33, captured first individual place among fifty vegetable judges, and John Kachadorian, also of the class of '33, was awarded first medal for rating as highest individual scorer in fruit judging with forty-five competitors.

Oscar E. Carlson

Mr. Carlson, a teacher on the staff of the Essex County Agricultural School, died on Friday, December 11. Funeral services were held in the Congregational Church in Middleton and the burial took place in the Oakdale Cemetery, Middleton.

Mr. Carlson joined this staff four years ago, coming to us from the Massachusetts Agricultural College where he was a graduate. He immediately took up his work as a teacher of science and English and became an earnest, enthusiastic member of the staff. Throughout this period of years he has been very earnest over the work of the School and the success of its students, who recognized him as a serious, earnest teacher willing to help them in every way in accomplishing their work. He had served as advisor on several of the publications issued by the student body.

Alumni Notes

Elinor V. Bacon, of Andover, valedictorian of her graduating class, '31, is attending the Vesper George School of Art in Boston. Miss Bacon plans to take the four-year course.

Esther Brovne of Lynn, class of 1931, is assuming the duties of household assistant in Salem.

Emily Bailey of Cliftondale, also a member of the class of '31, has joined a class in an evening aviation school. Boston.

Alice Louise Berry, '31, of Cliftondale, is assistant dietitian at the Peabody Hospital.

Madolyn Darling, class of '31, Beverly, is enrolled at the Salem Commercial School.

Catherine McNamee, also of Beverly, class of '31, has accepted a position as household assistant.

Russell Ray, '27, mechanics pilot at Chanute Air Field, Rantoul, Illinois, recently visited the School. Mr. Ray will be at home in West Newbury for a short time.

News of the School at a Glance

December 1

Miss Ethel Moore, department head, announced the names of students in the Homemaking Department who had made the first term honor roll. These are as follows: Isabella Shinner, Methuen; Viola Towns, Lynn; Elizabeth MacTague, Nahant; Adair and Victoria Townsend, Saugus; Kathryn Inglesby, Salem; Elaine Pingree and Bernice Ogden, Newburyport; Marion Currier and Ruth Thomas, Salisbury; Pauline Ramsey, Haverhill; Janice Wray, Isabelle Pillsbury, and Ruth Hall, Andover; Cora Ballard, Middleton; and Nelda Bourdelais, Lawrence. Lillian Degenhardt and Cecil LaFonde, both of Andover, were given honorable mention with averages of 84 plus.

December 4

The Misses Elinor and Mary Winslow of the Golden Yoke Farm, West Andover, and students of the Andover Grammar and High Schools, exhibited at this School more than three hundred varieties of pressed and mounted wild flowers and ferns which they have collected since early last spring.

Students were especially interested in the many species of delicate and hardy ferns exhibited. The entire display of rare wild orchids, common little weed flowers, and blossoms which had retained their color even after pressing, exemplified an interest on the part of the girls, requiring patience and careful research.

The particular interest in the exhibit lay in the fact that all of their collection included specimens found in Essex County.

December 7

First term honor students in the agricultural department were announced by H. A. Mostrom, educational manager. They are: George Mosse, Robert Wolcott, Clarence Patterson, Peabody; Franklin Edwards, Beverly; James Gardella, Dana Drew, Lucille Legasse, Fred Basile, and Forrest Haynes, Haverhill; Howard Stutz, Ipswich; Janus Ridley, Lynnfield; John Lynch, Alfred Webb, Austin Basso, James Smith, and Arthur Peatman, Andover; Thomas Swiniarski, West Peabody; Edward Glowacki, Henry Richardson, Milton Snow, and Walter Licht, Lawrence; Alfred Caproni, Paul Fischer, Henry Cooper, and Philip Hanson, Lynn; Jack Wong, Hyman Weinstein, Salem; David Carter, Gloucester; Elmer Flanders, Carlton Brown, Carl Swanson, and George Perkins, Rockport; Dora Winchester, Albert Nunan, George Souyrda, Robert Griffin, Saugus; Mortimer Brown, and Edward Brown, Marblehead; Benjamin Gregory, Revere;

(Continued on page 3, col. 2)

A Study of Milk Production Costs

Revised and brought up to date by the Farm Management Department, Massachusetts State College, December 5, 1931

The calculation of the cost of producing 100 pounds of milk involves careful cost records of the various items entering into the production of milk. The trouble with many milk production cost studies is that they are not typical of the average.

Since no recent dairy cost accounts are available in Massachusetts, the results of a survey, conducted by Mr. W. H. Broun in 1916, of the cost of milk production in Massachusetts, are used as the basis in this study. The quantity figures are presented in such form that when feed and labor change in price, the cost of production can also be changed by substituting new values.

In this survey

there was a group of 323 cows averaging 5500 pounds of milk per cow. (The average cow in Massachusetts at the present time produces 5623 pounds per cow according to the 1930 census.) Quantities of feed, applicable at the present time, are given in Table I. Prices used are current prices.

TABLE I

Amounts of Feed Consumed and Costs per Cow			
Quantity Price			
Feed	in lbs.	per tons	Total
Grain	2430	\$33.20	\$40.34
Dry Roughage	4857	15.00	36.43
Silage and other			
Succulence	5506	7.00	19.27
Pasture, 150 days at \$2 per mo.			9.90
Total Feed Costs			\$105.94
Feed Cost equaled 58.4% of total costs in the survey therefore:			
Total Costs equal			\$181.40
The following Credits should be allowed:			
Manure 8 tons at \$2 per ton			\$16.00
Calf, .8 Calf			4.00
Total Credits			\$20.00
Net Cost of Producing Milk per Cow			\$161.40
When production per cow is 5623 lbs. per Cow, \$2.87 per cwt., or \$.0617 per quart.			
The survey showed that 150 hours of man labor and 9 hours of horse labor were required per cow. With prices of 30 cents per hour of man labor and 15 cents per hour horse labor the total labor cost per cow would be \$46.35, and Total Feed and Labor costs \$152.29 per Cow.			
In the survey Feed and Labor Costs were 82.8% of the total costs. If this basis is used for calculating costs			

at the present time, the total cost per 100 lbs. of milk would be \$2.915, or \$.0626 per quart. This slightly higher cost is due to the fact that wages are relatively higher in proportion to other costs now than they were in 1916.

Reminders

Forests of this country are being cut four times as fast as they are being planted, according to foresters of the Massachusetts State College.

A bulletin on rope and its uses has been issued by the State College. It will be sent free of charge to persons who request it. Ask for leaflet Number 139.

Massachusetts 4-II club members won eight awards at the annual 4-II Club Congress held in Chicago during the first week in December.

State College entomologists say that most insects which are called bugs are not bugs, but are beetles. This is true of June bugs, lady bugs, and many others. Squash bugs, however, are true bugs.

Report of Bovine TB Situation in Essex County

Rockport, Gloucester, and Essex have been quarantined and 100% TB tested. Lawrence, while not quarantined, has all its cattle tested.

In Salem, the health regulations require that all milk for sale in that city be pasteurized. (Its cattle have also all been tested).

Towns having submitted petitions are: Manchester, Beverly, Ipswich, Danvers, Middleton, North Andover, Andover, Haverhill, Merrimac, Topsfield, and Boxford. Petitions are being circulated in Amesbury, Salisbury, Newburyport, Newbury, West Newbury, Hamilton, Wenham, and Methuen.

No new herds not previously tested will be tested now by the State unless a petition, signed either by 75% of the dairymen or by the owners of 85% of the cattle, has been filed with the Director of the Bureau of Animal Industry for the town or city concerned.

The indemnity on grade cows: maximum \$50 per head; federal indemnity: \$25. In addition, a dairyman gets whatever salvage the butcher will pay him.

—F. C. Smith.

(Continued from page 2, col. 3)

Donald Bentley, Methuen; Michael Pickowicz, Billerica; George Lambert, West Boxford; Nathan Clark, Swampscott; Olin Donnelly, W. Newbury; Caesar Rosi, Middleton, and Malcolm Spalding, Newburyport.

Agricultural Library is Recipient of Interesting and Useful Books

A gift of forty books, dealing with the many phases of agriculture, was presented by Mrs. M. B. Redmond of Salem, Mass.

Student Michelson, class of 1933, gave thirty-five books, mostly under the subjects of history, biography, and literature.

The Beekeeping division, under the supervision of Instructor Meigs, purchased twenty-seven beekeeping books for the school. These books deal with every problem of beekeeping as may be seen by the title of one particular book, "A Thousand Answers to Beekeeping Questions."

These gifts plainly show the interest of the students, as well as the general public, in the enlarging of agricultural and academic material for student use.

—D. E. PAGE, Librarian.

Vegetable Gardeners' Meeting

A meeting to be held at this School on January 12 will be of particular interest to vegetable gardeners. Professor F. H. Branch of the State College will present a gardener's report at 1:30 P. M., based on a summary made a year ago. Following Professor Branch, Dr. O. C. Boyd, Extension Plant Pathologist, will give results of recent experiments on the source of vegetable seeds and the control of various vegetable diseases.

Reunion of '21 and '16 Classes

At an alumni business meeting held after the graduation exercises on November 24, the following Association officers were elected for the coming year: President, Everett Jones, class of '22; Vice-presidents, Mrs. Elizabeth Playden and Llewellyn Jones (re-elected); Secretary-Treasurer, Horace J. Shute (re-elected).

This year the classes of '21 and '16 held their tenth and fifteenth reunions, with a gathering of the present graduating class. The Association was fortunate in securing for its after-dinner speaker, Mr. Charles A. Green, Assistant District Attorney of Essex County, who outlined briefly but logically notes of interest relating to the county prosecutor's office.

A dance held from 8 to 12 in the assembly hall was attended by more than two hundred alumni and guests.

Child Development

Mrs. Ruth D. Morley, Extension Specialist in Child Development, is conducting an interesting course in Andover and in Newburyport. The Andover group is made up of mothers from the several communities of Andover and towns surrounding Andover. The Newburyport group consists of leaders from Newbury, Salisbury, Merrimac and Boxford.

At the last meeting Mrs. Morley discussed eating habits.

Excerpts from her talk

are as follows:

"How often mothers say to me, 'My child will not eat the things she should have,' or 'My little boy dawdles with his food until I have to feed him myself.' The list of feeding problems could be lengthened almost indefinitely. The reasons 'why' would be almost as long. This is almost an individual problem with each mother and each child."

"Regularity as an influencing factor in eating cannot be over-emphasized. From the initial feeding, the whole process of eating should be put on a strictly routine basis."

"The attitudes that the child has toward food and eating are often the result of his having learned them as a result of satisfactions or dissatisfactions obtained on previous occasions."

"As in other of the child's activities, he may early assume the responsibility of doing things for himself. While it would not be wise to force the child to feed himself, his first interest should be seized upon so that by the age of 2 or 3, he is fairly self-reliant."

"If your child dawdles

you may find the seat of the difficulty in any one or more of several definite causes. Does he like to be fed by you; does he like the attention, good or bad, which you give him when he refuses to eat; have you discouraged his early attempts to feed himself; is he really hungry; if not, why; is he too tired; do you have a definite time which you allow for him to eat and give him no more food until the next meal, or does he eat when he is hungry and is he then allowed to sit at the table until everybody gives up in despair; are there too many interesting things to divert his attention while eating; are there some foods over which he dawdles and others over which there is no difficulty? Recognizing the law of satisfaction which is back of behavior, it is necessary to remove any of the above conditions which would be naturally satisfying to the child, and arrange so that some dissatisfaction is experienced as a result of dawdling.

Report of 4-H Club Activities

There have been 419 boys and girls enrolled in club work this past year in Essex County. Of that number, 283 boys and 787 girls completed the work of the project, showing an increase of 20.3% over the work completed in 1930. One hundred and sixty-one clubs have been carrying on under the guidance of seventy local leaders.

REPORT BY PROJECTS

Clubs	1931		1931	
	Enroll-	Com-	Per	
	ment	pleted	Cent	
Clothing	36	414	374	90
Food	22	183	152	83
Garden	37	321	223	69
Poultry	9	89	75	91
Handicraft	13	110	83	75
Big Sister	4	35	35	100
Dairy	1	15	7	47
Forestry	1	6	6	100
Canning	41	464	306	66

Of the work accomplished, 1510 new garments were made, valued at \$1894.25, and costing \$950.33, making a total saving of \$945.92. Furthermore, 17,499 jars of fruits and vegetables were canned, in addition to 2402 jars of jams and jellies. Approximately 22 acres of gardens have been planted at a cost of \$1871.70, with a saving of \$3043.71 (value, \$4915.41). Finally, 2955 birds have laid 220,691 eggs in 187 days, totaling a profit of \$3628.04. The profit per bird amounted to \$1.24.

This record tends to show the vast accomplishments of boys and girls who are bound, with such initiative, to be of increasing value in their homes, communities, and quite possibly their country.

Child Training Material from the White House Conference

Three excellent booklets, summarizing the findings of the White House Conference on Growth, Habits, and Personality of children have been reprinted by the "Farmer's Wife." These may be obtained at a nominal fee by applying to the Child Welfare Department, "Farmer's Wife," St. Paul, Minnesota.

Mothers will find this a valuable aid in their problems of child training.

At the next meeting, to be held in January, Mrs. Morley will discuss Play, Its Value and Practical Equipment. All mothers are cordially invited to attend. The Andover group will meet in the Andover Guild Rooms on Thursday, January 7, at 2 P. M. The Newburyport meeting will be held at the Newburyport Y. W. C. A. on Friday, January 8, at the same hour.

Home Furnishing Specialist Starts New Project

A new project is to be launched in January which will be helpful at this particular time when homemakers are eager to economize. There will be three meetings on Curtains, Slip Covers, and Homemade Rugs.

The purpose of the project is to help the homemaker to beautify her home with simple inexpensive draperies, to protect new furnishings and conceal the old and worn, and to use up old materials with the making of various types of rag rugs. This course will be held at the Haverhill Y. W. C. A. and will be attended by project leaders from surrounding communities. Any community wishing help in this direction should get in touch with the town chairman, help her to find project leaders, and form a group.

The first meeting for project leaders will be conducted by Miss Grace B. Gerard, Home Furnishings Specialist, at Haverhill on January 15th. Anyone wanting further information may be assisted by Miss Marion P. Crawford, Home Demonstration Agent, Hathorne.

The project will be carried in other parts of the county later in the season by Mrs. Mary McIntire. Town chairmen wishing this project should send requests to the Home Demonstration Agent.

WBZ Home Economics 1932 Forum

- Jan. 4 Miss Foley—What Food for Winter.
 11 Mrs. Morley—Self Reliance.
 18 Miss Pozzi—Outdoor Fun.
 25 Mrs. Herr—The Family—A Unit in the Extension Program.
- Feb. 1 Miss Foley—Three Meals a Day.
 8 Mrs. Morley—Family Cooperation.

Second Meeting in Home Gardens Project

All those who attended the October meeting on Home Gardens conducted in West Boxford by Professor A. M. Davis, of Amherst, will be glad to know that a second meeting will be held on Thursday, January 14, in the Community House. Special individual problems as to the development of Home Gardens will be discussed by Professor Davis. This will be of particular interest to women who desire nearly continuous blooming flowers in their gardens. Color interest is also stressed.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 13

HATHORNE, MASS., JANUARY, 1932

NO. 1

More Light on Hatchability

It has long been advised that eggs to be saved for hatching purposes should be gathered frequently during cold weather to avoid chilling. Weather conditions at the time of producing hatching eggs have been known to affect hatchability, but the question has been, "have the eggs been chilled, or have they been indirectly affected through the birds themselves?"

A western experiment station conducted an experiment with several lots of eggs, some being used as controls and some being exposed to low temperatures. The results obtained were as follows:

Eggs kept in a refrigerator at 15° F. for 1½ hours hatched as well as the controls.

No reduction in hatching power of eggs after exposure to 32° F. for 6 hours.

Exposure at 32° F. for 12 to 18 hours did not influence hatches to any great extent.

The preceding low temperatures did not result in an unusual number of crippled chicks nor in lowered vitality of the chicks hatched.

The experimenters concluded that in all probability the lower fertility and poorer hatches commonly obtained with eggs produced during and just after very cold weather and severe storms is due to inactivity and lowered vitality of the breeding birds rather than to the direct influence of low temperature on eggs.

—J. Stanley Bennett.

Rural Fire Protection

No rural community can afford to be at the mercy of the disastrous results of fire.

Approximately 35,000 farm fires raged in the country in 1931, destroying \$150,000,000 worth of property and totaling a loss of 3,500 lives. Adequate fire-fighting facilities and average precaution against fire would have reduced losses 60 to 90% thus saving millions of dollars in property and the lives of hundreds of citizens.

Following is a list of common causes of fire in rural homes: (1) defective chimneys; (2) woodwork against chimney walls; (3) hot-air pipes too close to woodwork; (4) furnaces and bake ovens on wood floors; (5) no floor protection under stoves; (6) overheating of stoves and furnaces; (7) electric irons and electric

cooking utensils left with power turned on; (8) ashes put into wooden or cardboard containers; (9) gas or kerosene jets left turned on; (10) no fire extinguishers left in convenient places.

Correction of these points about our home will not put out a fire already started but it will rather prevent the starting of that fire.

ESSEX COUNTY	
Farmers' and Homemakers' Day	
WEDNESDAY, MARCH 9	
Hathorne	
Industrial Exhibits	
Extension Exhibits	
School Exhibits	
Speakers of Note	

The New Publication

It becomes our pleasant duty to welcome into the territory exactly co-incidental with our own territory, namely Essex County, a new publication. This publication "The Essex County Farmer" appeared on Thursday, January 14, from the office in Salem. It was no surprise because we had already become well acquainted with the management and their plans and as an organization we were quite willing to cooperate with them.

We see no reason why the advent of the new "Essex County Farmer" should modify the plans of our "Farmer and Homemaker." Our publication is put out for the purpose of tying all interests together which naturally center on or gravitate around the School as an organization. In fact it is an official approach from the Trustees and the Staff to the interested citizens of the county. We understand the plans of the new publication to be the supplying of ready agricultural news and to keep abreast of the progress of agriculture in this region and elsewhere and to keep its clientele well informed on general agricultural matters. We certainly approve each step and it appears to be our natural duty to assist the new publication in every possible manner.

Our own publication carries no advertising, it is non-commercial, and aims to record the history and doings of the School. The new publication

Striking Victory in Fruit Judging

In a fruit judging contest held in connection with the Union Agricultural Meetings in Worcester on January 8, three students from the Essex County Agricultural School made an outstanding achievement. Of the five prizes offered by the Massachusetts State Board of Agriculture these students captured the first three.

Twenty-eight boys representing agricultural schools, agricultural departments of high schools and 411 clubs from all parts of the State participated. John Kachadorian, Methuen, placed first; Carleton Symmes from Saugus, second; and Steven Hanson of Rowley, third. Kenneth Howes of Ashfield (Sanderson Academy) won fourth prize.

This contest determines the award of a \$60 scholarship for further education offered by the Massachusetts Fruit Growers Association. By their high scores, John Kachadorian and Kenneth Howes eliminated all other contestants for the scholarship. But since the competition has been so keen between these two students it is necessary to review their fruit projects and project reports before making the award. This scholarship has been won for the past two years by a student of the Essex County Agricultural School, namely Bradford Webb of Andover, who is now making use of this money by attending the Stockbridge School of Agriculture at the State College.

These astute young judges are all members of the Essex Chapter of the Future Farmers of America, through whose cooperation, participation in this contest has been made possible.

—C. M. Wood.

will be very commercial. It will aim to supply, we believe, many things that the rural and town home needs in the way of a regular rural periodical. They can carry worthwhile advertisements. They should keep their subscription list promptly acquainted with all problems of the widest possible range which have a bearing on the home and home farm life.

With this wide difference in scope it would seem that there is ample room for both publications and we wish our new contemporary the best of success and prosperity.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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CALENDAR

January 21—Essex County Rabbit Breeders' Association regular monthly meeting—8 P. M. at this School.
January 23—Boston Market Gardeners' Association—12.30P. M. at the School.
January 29—Junior Prom.
Norfolk basketball game here. Close of second term.
Meeting of Adult Evening Fruit Class.
February 12—Meeting of Adult Evening Fruit Class.
February 18—Patriotic joint-assembly.
February 19—Norfolk basketball at Norfolk.
February 19-29—Homemaking recess.
February 20-23—Rabbit Breeders' Show in the School gymnasium.
March 9—Farmers' and Homemakers' Day.
March 11-12—State F. F. A. meeting at Amherst.

Staff Club Relief Work

The Staff of the Essex County Agricultural School has organized an association for the purpose of extending relief to worthy causes. The members have purposely assessed themselves a definite percentage of their pay. They are now in the third month of this plan.

Since the School is a County-wide endeavor, it has seemed wise to the Staff to make definite cash contributions to various county relief units as well as local. There is no definite plan to extend aid to our own students unless specially worthy cases appear. Some of the agencies which the Staff are now working through are: County Red Cross, County Salvation Army; North Shore Babies Hospital; Hunt Memorial Hospital, and Danvers Public Welfare.

In order to carry out the work effectually, representatives of the Executive, Agricultural, Homemaking, Office and Extension branches of the School were chosen. This executive committee has been organized with Miss Ethel M. Moore, Chairman; George E. Gifford, Secretary; George A. Meigs, Treasurer.

Basketball

Under the able coaching of P. H. Conhig, the Aggie basketball team has played victorious games over all its opponents but one, to date. Following is a schedule of the games, past and future: January 6, Alumni (32-24); January 8, General Electric, (30-12); January 12, at Fitchburg, (23-46); January 14, at Marblehead, (31-21); January 16, at Lynn Y.; January 20, at Haverhill; January 22 at Salem Normal; January 27, Revere; January 29, Norfolk; February 5, at Gloucester; February 6, at Beverly; February 10 and 12 open; February 16, at Lynn G. E.; February 19, at Norfolk; February 24, Salem Normal; February 26, Marblehead; March 2, at Revere; March 4, at Salem.

Unit Course Graduations

At the fifth annual graduation of short unit courses in poultry husbandry and dairy laboratory, twenty-three candidates received diplomas December 28 at this School.

Fred J. Sievers, director of the experiment station of M. S. C., addressed the graduating classes with remarks pertinent to labor conditions. It is his opinion that just as a six-days-a-week labor device proved successful and inasmuch as Union Labor came through in the face of opposition, just so the Nation will go one step more and result in distributing labor, thus prosperity.

Following is a list of the graduates: Poultry: Alton Cleveland, N. Sangus; William C. Myrick, George Oulton, Sangus; Winfield L. Corbett, James C. O'Brien, Edgar A. Oicles, Wakefield; Myrtle M. Craig, William Craig, Joseph V. Joyce, G. Layton Stearns, Danvers; Walter Dennis, Marblehead; Dominic Ingemi, Leslie E. McElhiney, Salem; John F. Johnson, Middleton; William T. O'Meara, Peabody; M. C. Pearson, W. Peabody. Dairy: Albert King, Hathorne; Earl B. McCarron, Alfred W. Owens, Raymond Turner, Haverhill; Leslie L. Putnam, Peabody; John Walsh, Danvers; Howard Wilbur, Bradford.

Hockey Schedule

January 21—Marblehead.
January 26—Haverhill.
February 4—Stoneham High.

News of the School at a Glance

December 18

At a Christmas assembly, the Seniors and High School Specials entertained with the presentation of a quaint play, "Do You Believe in Luck?" and minstrel show, coached by the class advisors, Miss Margaret Harris and C. M. Stearns. Dancing followed, to complete the festive program.

December 30

The following boys from the School judged at the Boston Poultry Show: Ralph Broughton, Bryce Ham, Russell Snow, Chester Dunn, Walter Lewis, Thomas Swiniarski, Chester Ellis, George Lambert, and Alfred Webb. This does not include the 4-H judging team.

January 13

The School was fortunate in having for its joint-assembly speaker, Reverend Carl A. Hemple of the First Universalist Church in Lynn. Mr. Hemple chose one of Carlyle's quotations for the theme of his talk: "Unfold yourself; work what thing you have the faculty for."

January 14

A film entitled "In the Spud Country," depicting the planting, cultivating, harvesting, and shipping of potatoes in Aroostook County, Maine, was a feature of the regular morning assembly. It was through the courtesy of Mr. F. S. Wood of the International Harvester Company that the agricultural department was given this opportunity.

Alumni Activities

Leonore E. Alward of the 1930 class is employed in a Newburyport hair-dressing parlor.

Mildred L. Russell, class of 1928, of Danvers, is household assistant for a Marblehead family.

Mildred Watson, Danvers, class of 1929, is training at the Beverly Hospital and Children's Hospital in Boston.

Norma Nickett, Haverhill, class of 1929, is a senior student nurse at the General Stephen Henry Gale Hospital in Haverhill.

Llewellyn Jones, class of 1929, is employed in Robert H. Sawyer's cafeteria, 41 Main St., Haverhill.

At a recent meeting of the Judging and Demonstration Committee of the Essex Chapter of the Future Farmers of America it was recommended that provision should be made at fall fairs and the Boston Horticultural Show for a group of teams from different schools to judge plant materials. It is believed that this would stimulate interest among Floriculture and Ornamental students.

Dairy Breeding School

Arrangements are being made by County Agent F. C. Smith for a breeding school for dairymen and livestock breeders. The probable opening date will be February 9, with a meeting also on the 10th. These will be held at the Essex County Agricultural School.

Professors C. J. Fawcett and V. A. Rice of the Massachusetts State College will be the instructors in this school (the first of its kind ever held in Essex County.)

Program

First day—

- 10 A. M.—Introductory remarks by the County Agent.
- The Dairy Situation briefly outlined by Professor Fawcett.
- Illustrated talk on Principles of Breeding by Professor Rice.
- Lunch.

- 1 P. M.—Some Outstanding Breeding Problems, Professor Rice.
- Examination of reproductive organs of cow, Professor Fawcett.
- Questions for discussion.

Second day—

- 10 A. M.—What Production and Cost Records Show, Professor Fawcett.
- Illustrated Breeding Talk No. 2 by Professor Rice.
- Hereditascope.
- Lunch.
- 1 P. M.—Pedigree Study, Professor Rice.
- Selection of bulls and the bull index, proven sires, by Professor Rice.

Anyone desiring to take this course should write to F. C. Smith, Hathorne, in order that necessary plans may be made. There is no charge for this course.

rots. The prize has been won two successive years by L. E. Ellsworth of Southboro. If he wins it again the handsome silver cup becomes his permanent property. In other years this contest has brought out keen competition and the present year bids fair to be no exception.

Facts

The Massachusetts State College experiment station announces that for the first time since the Hutchinson carrot was developed ten years ago a sufficient supply of seed for every grower in the State is available. The Boston Market Gardeners Association, 240 Beaver St., Waltham, is marketing the seed at cost in lots of one-half pound or more.

A little over two acres of land are required to produce food for the average American.

Massachusetts State College horticulturists have just published a leaflet on house plants which is available free of charge. It is leaflet 103, "House Plants."

Heat, light, rain, dirt, and wear are enemies of fur according to Mrs. Esther Cooley Page of the Massachusetts State College.

Egg yolk contains more iron than any other common food. Liver, kidney, brain, and heart are also rich in iron.

Veterinarians in Massachusetts are offering services free to 4H club members.

At a meeting of market gardeners, Dr. O. C. Boyd, Extension Plant Pathologist of M. S. C., stated that it is evident that mosaic can be transmit-

ted by seed even though the seed is planted in sterilized soil; i.e., it is a seed-borne disease, or virus.

Beet Pulp for Dairy Cows

Most dairymen think it is necessary or at least desirable to soak beet pulp before feeding it to cows. Investigators at the United States Dairy Experiment Station at Beltsville, Md., found that dry beet pulp gave as good results as the soaked beet pulp. In the experiment the cows were watered twice a day. The beet pulp when fed either wet or dry was mixed with the grain ration. The ration containing the dry pulp was fully as palatable as that containing the wet pulp. The cows when fed the dry pulp ate as much hay and gave as much milk as when fed the wet pulp. The gains in weight were a little greater when the cows received the wet pulp than when they were fed dry pulp.

—U. S. Dept. of Agriculture.

Washington Essay Contest

To stimulate interest in the agricultural activities of George Washington, an essay contest is being conducted for students in vocational agricultural schools and departments of this state. Students are to prepare essays 1000 to 2000 words in length on Washington's influence on American agriculture. The contest is being conducted under the direction of Mr. F. E. Heald, Supervisor of Agricultural Education in Massachusetts.

—G. E. GIFFORD.

Market Gardeners' Meeting

The Boston Market Gardeners' Association, following their usual custom, are holding a regular meeting at the Essex County Agricultural School on Saturday, January 23. The printed program calls for luncheon and social hour from 12.30 to 1.30, business meeting at 1.30 including nomination of officers for the ensuing year, to be followed by a talk on the "Travelers' Aid and the Present Crisis" by Miss Marjorie Warren, General Secretary of the Society. This in turn will be followed by a series of reels on labor-saving devices on Massachusetts market gardens. Rollin H. Barrett of the Massachusetts State College will conduct this part of the program. This should prove to be a most valuable feature.

This meeting is the annual meeting to which members bring the ladies.

A most interesting contest will be the box contest of Hutchinson car-

Weather Summary

	Sept.	Oct.	Nov.	Dec.	Year (1931)
Maximum temperature	97°	81°	75°	56°	95°
Minimum temperature	36°	27°	16°	9°	—
Mean daily temperature	63.7°	54.1°	45.5°	31.9°	49.8°
Five-year average, '26-'30	61.7°	51.3°	42.0°	29.5°	47.8°
Least daily range	4°	4°	2°	4°	2°
Greatest daily range	37°	29°	33°	28°	39°
Precipitation	1.93"	2.47"	1.12"	3.71"	41.93"
Five-year average, '26-'30	2.53"	3.58"	3.29"	3.61"	36.82"
Excess for year					5.11"
Average relative humidity (S. A. M.) ..	82%	69.7%	72.7%	71.7%	74.1%
Number days rain fell	6	17	8	13	18
Clear days	16	7	9	9	15
Partly cloudy	7	8	10	7	10
Cloudy	7	6	11	15	113
Total hours sunshine	241.5	228.5	134	120.5	2431.5
Per cent sunshine	64.3%	66.5%	45.5%	42.5%	54.6%
Snow fall				Trace	2.5"
First heavy frosts					41°
Last heavy frosts					
October 10th to 13th					
May 18th					

Perhaps the most striking feature of 1931 weather was the excessive temperature recorded. The mean daily average was the highest recorded here at school since records have been taken, and in Boston the figure was the highest ever recorded (60 years).

Up to September the year's rainfall gave indication of being the heaviest ever recorded here. Then followed three unusually dry months and a normal December, which made the yearly figure 41.93", which has been exceeded twelve in the past 7 years ('25 and '27). However, the figure is more than 5 inches above the 5-year figure and nearly 10 inches more than 1930.

The humidity was about normal. As was the number of rainy, clear and cloudy days. Snowfall was slightly above normal and sunshine considerably below, notwithstanding the very beautiful and sunny fall.

The length of growing season, disregarding a very light frost June 3rd, was from May 18 to October 10, 144 days, which compares with 1930, May 31 to October 21, 142 days.

From a growing point of view the season was satisfactory outside of a very wet June. To the average person the year will probably be recalled as one in which the weather was in most respects very pleasing.

Emergency Nutrition

The following excerpts are printed in answer to questions sent to the Home Demonstration Agent, regarding Low Cost Meals.

The food problem of the unemployment presents itself primarily in the form of the question, What best to do with an inadequate amount of money?

The guiding principle should, I think, be to provide those nutritional essentials of which a shortage tends to permanent injury, and to do this (while necessary) even at the cost of a sacrifice of other features of the dietary which are normally desirable but not absolutely essential. Let no one be misled by the extravagant phrase "deadly monotony." No deaths are ever caused by monotony of diet if the diet, however simple and cheap, provides the actual necessary nutrients; while shortages of these nutrients do cause all too many deaths, if not directly, then by lowering the resistance to disease.

One can forego

flesh, fish, fowl, and sweets, and most of the sweetened and shortened products of the bakery, and most of the miscellaneous foods bought in the grocery, if one gets enough of milk in some form and of some fruit or vegetable to provide the absolutely essential mineral elements and vitamins, and if to these foods enough breadstuff be added to prevent actual weakness from hunger.

Thus if forced below reasonable standards to bare essentials, we may, in the light of our present knowledge of nutrition, most wisely meet the emergency by concentrating our attention upon efforts to provide these three essential groups of foods: (1) milk and its products; (2) fruit

and/or vegetables; (3) bread and other cheap sources of calories.

If there are times and places of such dire destitution that sacrifices must be made even among the three bare essentials of bread, milk and some fruit or vegetable, each in the cheapest available form, what then?

The dietary should be built around bread and milk. The lower the level of expenditure, the more one must forego other foods and concentrate effort upon providing these two, supplemented by a little of some inexpensive fruit or vegetable.

This is the teaching of our present knowledge of nutrition reduced to its barest terms for the meeting of a real emergency.

—Henry C. Sherman,
Columbia University,
in "The Child Health Bulletin."

Wayside Stands

HELP TO BE GIVEN BY STATE SPECIALIST

It is a long look ahead to March but we are already making plans to help women who are operating Wayside Stands.

This course will consist of two all-day meetings held at the Essex County Agricultural School on March 18 and April 15, to be conducted by Mrs. Harriet J. Haynes, Extension Economist. The Home Demonstration Agent would like to have names of all those interested in this subject sent to her office. Details will be furnished them in due time for the course.

Question. Does voisteral take the place of cod liver oil?

Answer: Only as far as the vitamin D is concerned. It contains no vitamin A, the one which helps prevent colds and other infections.

County Home Demonstration Agent's Activities

The following chart was compiled for Miss Crawford's annual report of 1931. It is interesting to look back on five years' accomplishments and see how the Home Demonstration Agent's program has developed. We

would like to call attention to the number of voluntary and community project leaders. It is through their effort and cooperation that the work has been carried to so many women.

	1927	1928	1929	1930	1931
New Communities developed	21	13	12	7	5
No. of Com. carrying Extension Proj.	28	33	36	44	47
No. of Project Leaders	42	83	115	79	57
No. of groups carrying Ext. Projects	41	57	76	72	94
Membership in Groups	410	794	1026	1097	1869
No. of Different Women	398	763	905	763	1188
No. of voluntary and Com. Proj. Leaders	77	94	143	205	186
No. Meetings held	85	150	232	227	347
Attendance at Meetings	2205	3240	4960	4772	5453
No. of Nutrition Groups	13	5	34	21	16
No. of Clothing Groups	12	30	19	19	17
No. of Home Management Groups ..	4	20	21	23	42
No. of Child Development Groups ..	0	0	2	9	9
No. of Home Nursing Groups	14	14	14	11	11
No. of Home Garden Groups	0	0	0	0	1

1932 4-H Dress Contests

Plans for the 1932 Massachusetts Dress Contests are looming up. Essex County 4-H girls will want to compete in the state contest to be held the latter part of June. First prize winners in classes 1, 2, 3, 4, of county dress contests will be eligible. No girl may enter more than one of classes 1, 2, 3, and 4.

The classes are divided as follows: (1) School dresses for girls 12 years of age and under, to be made of cotton material; (2) School dresses for girls over 12, to be made of cotton material, may be a dress or suit, and must have set-in sleeves; (3) Informal party dresses for girls over 12 who are taking Program D or more advanced work, and for other older girls approved by a club agent; slip must also be made and entered with the dress; (4) Semi-tailored silk or silk type (rayon, etc.) dresses for older girls taking advanced work, and preferably limited to those who have been in previous contests.

Ineligibilities

Girls who have won the prize of representing Massachusetts in the National 4-H Dress Revue at Chicago are ineligible to enter any part of the contest. Girls who have been first prize winners in county contests in previous years may not enter the same class of county contest again. This applies likewise to girls who have been first prize winners in state contests.

General Rules

1. Contestants must have been clothing club members during 1931-1932. 2. The dress must be cut out and made entirely by the contestant. (A statement of this should be signed by the local leader or club agent.) 3. Each exhibit should be accompanied by a cost record, including cost of pattern, material and trimmings; and also labelled with name, address, age, and year of clothing club work of contestant. 4. Dresses to be eligible for prizes must be judged both off and on the girls. 5. If the girl is allowed to enter more than one class, in case she scores highest in both classes, she should receive only one award, first prize.

Special Class

Each county may enter one contestant, chosen by a club agent, from local exhibits or from a county contest, in a special class for renovated outer garments to be included in the state contest. Dresses, coats, or suits may be entered. Awards will be made on the basis of skill shown in the "making over" and the becomingness, fit, and cost of the article. A description of the original garment and account of changes with a sketch if possible must accompany exhibit. It should be shown on the person for whom it is made.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 13

BATHORNE, MASS., FEBRUARY, 1932

NO. 2

New Varieties in School Fruit Nursery

The fact that Massachusetts is really the seat of American horticulture is supported by records indicating that a total of 142 named varieties of apples have been developed in this State by fruit growers and breeders. Of these the Baldwin apple is in all probability the most prominent today. Hubbardston is a variety taking its name from the town in which it was originated nearly a century ago. Benoni, Mother, Fall Orange, Roxbury Russet, and Tolman Sweet are other Massachusetts-bred varieties. In addition to the apples that originated in the state, several European varieties were imported 100 years ago which are still commercially conspicuous. These are: Alexander, Duchess of Oldenburg, and Tetofsky.

The oldest planted fruit-bearing tree in America is a pear tree between Danvers and Salem on the farm once owned by Governor John Endecott. There is evidence indicating that the tree was brought from England in 1630 by Governor Winthrop and was planted in its present location in 1632 by Governor Endecott. Two suckers which appeared in 1837 now make up the entire tree.

However, new varieties are constantly being developed by agricultural Experiment Station workers and others, some of which will doubtless prove superior to our well-known varieties. Only by trial in many localities and by many people can we know whether or not these new varieties are better than the old.

The Essex County Agricultural School is testing in its fruit nursery over 250 new varieties of apples, peaches, pears, plums, cherries, nectarines, grapes, strawberries, raspberries, blueberries, and elderberries.

Following is a list of some of the most promising newer varieties: *Apples*: Early McIntosh; Milton; Melba; Lobo; Cortland; Macoun, all very similar to McIntosh in quality. (The first four are earlier and the last two later than McIntosh so that we may look forward to having apples of McIntosh quality in season from mid-August to late winter.) Carleton, similar to Red Astrachan, but a month later; Red Gravenstein, a solid, red-colored Gravenstein; Medina; Starking; Richard, improvements over Delicious in size and color.



A DWARF APPLE IN THE SCHOOL NURSERY

Pears: Cayuga, a larger Seckel; Phelps; Pulteney, of Bartlett type.

Peaches: J. H. Hale; Rochester; Mikado; Early Elberta; South Haven.

Plums: Beauty, one of the best of Japanese plums; Hall, a large, red-purple plum; Abbon, a large, very late, purple-black sort; Stanley, a large, blue, mid-season sort.

Cherries (sweet): Bing, large, dark red, midseason variety; Seneca, dark red, ripens two weeks before Black Tartarian.

Nectarines: Hunter; Sure Crop; both hardy and productive.

Grapes: Fredonia, black, one of earliest to ripen, quality as good as Concord; Ontario, very early, golden white sort; Portland, early green-white grape; Dunkirk, a midseason red; Sheridan, black.

Red Raspberries: Viking; Newman; Herbert; Latham.

Strawberries: Bliss; Bouquet; Cato; Mastodon (ever-bearing).

Basketball

Follow: the scores of the baseball games played to date: January 6, Alumni, 32-24; Jan. 8, General Electric, 30-12; Jan. 12, Fitchburg, 23-16; Jan. 14, Marblehead, 31-21; Jan. 16, Lynn Y., 23-19; Jan. 20, Haverhill, 19-39; Jan. 22, Salem Normal, 23-25; Jan. 27, Revere, 27-31; Jan. 29, Norfolk, 29-12; Feb. 6, Beverly 15-35.

*The School scores stand first.

Preliminary Program for Farmers' and Homemakers' Day

To the Essex County Agricultural School, March has become a month significant not alone for strong winds and new buds, but for a day, always the second Wednesday, which has for seventeen years been set aside to help, in extensive ways, farmers and homemakers in Essex County. This year the Wednesday falls on March 9. With a program high in agricultural value, and of no less interest to homemakers, the School buildings will doubtless rock and bulge with people from all over the county.

For the morning program we are presenting Professor J. H. Frandsen, Head of the Dairy Department of Massachusetts State College, who, with slides, will describe "Agriculture and Cooperation in Denmark, as I Saw It." This is a subject which concerns alert-minded people, whose desire it is to see how other people do it.

In the afternoon, from 1:30 to 3:30, sectional meetings will be held for the purpose of discussing Homemaking, Poultry, Dairy, Fruit, Market Garden, and Floriculture subjects.

In the Homemaking building, Mrs. Harriett J. Haynes, Specialist in Home Management at Massachusetts State College, will discuss "Wanted—More Time." Following her talk, Mrs. Marion Rudkin, story-teller, lecturer, and homemaker, will present a topic of wide interest: "Training Youth Through Story-Telling."

In the Agricultural building, main hall, at 1:30, Professor F. H. Branch will give the Poultry Outlook for 1932. "Present Ideas in Poultry Feeding" will follow, as presented by Professor A. G. Philips of the Allied Mills Inc. Professor W. P. Graham, noted poultry authority, head of the Poultry Husbandry Department, Ontario Agricultural College, Guelph, Canada, will conclude the poultry program with advice on "Poultry Management."

In the lower hall of the Homemaking building, dairymen will hear W. F. Davis, representative of the New England Dairies, give a "Discussion of the Dairy Situation." "The State Standpoint in the Milk Situation" will be ably defined by State Coun-

(Continued on page 2, col 1)

Essex Farmer and Homemaker

HATHORNE, MASS.

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CALENDAR

- February 19-29—Homemaking recess.
February 20-22 — Rabbit Breeders' Show in the School Gymnasium.
February 23—Outlook Conference at the School. Professor Rowe will give a series of agricultural outlooks for 1932.
February 25 — Poultry Association meeting and supper Grange Hall, West Andover.
March 9—Farmers' and Homemakers' Day.
March 11-12—State Future Farmers' of America meeting in Amherst.
March 17—Rabbit Breeders' Association at the School. Professor Glatfelter on "Feeding."

(Continued from page 1, col. 3)

missioner of Agriculture, A. W. Gilbert, and Harvey Turner, President of the Essex County Dairymen's Association, will talk on "The County Milk Situation." F. H. Branch will bring this section to conclusion with the 1932 Dairy Outlook.

Fruit men will meet in room 28 of the Agricultural building to hear the Fruit Outlook for 1932 by H. B. Rowe. Archer Pierce of the Brooksby Farm, Peabody, and sole member in Essex County of the 90% Clean Apple Club will tell "How I Produce 90% Clean Apples." An illustrated lecture by Professor G. A. Potter, University of New Hampshire, will portray the subject "Reducing the Cost of Apple Production."

The market gardeners' section, meeting in room 37, offers Warren D. Whitcomb, Entomologist, of the Market Garden Field Station, Waltham, on "Control of Insect Pests." "Fertilizers for the Market Gardener" will be discussed by Paul A. Dempsey, Field Superintendent of the Market Garden Station. Mr. Lawrence Bevan, Director, Division of Markets, will talk on "Roadside Stands and Farm Markets." "The Market Garden Outlook for 1932" will be outlined by

(Continued on page 2, col. 3)

Alumni Notes

We have recently learned that Paul Isley of the 1928 class was married November 1st, 1931. Mrs. Isley was formerly Miss Isabel Foote of Salisbury.

Franklin Ellis and James Forrest of Methuen, class of 1930, were among the January visitors at the School. Ellis is operating a greenhouse and nursery in Methuen.

Seen at the Junior Prom were Viola Messer, '29; Margaret Gordon, '30; Evelyn Lorenz (formerly Evelyn Hudson), '29; Eleanor McGlew, '30; Annie Dickenson, '29; Kathleen Connelly, '30; Julia Bruce, '31; Mary Hammond, '31; Arthur Henderson, '29; Merritt Blake, '31; Woodbury Bartlett, '31; Aarne Kolhonen, '30; John MacKenzie, '31; Lawrence Westcott, '31.

George E. Garland, class of '22, is employed by the Economy Fuse and Manufacturing Company. His home address is Prospect Road, Andover.

Among the graduates and former students attending the Dairy Breeding School, held February 10 and 12, were Ralph Woodworth, '19; Frederick and Warren Shiers, '31 and '30, and Stanley Chlebowski.

Washington Essay Contest Results

The essay contest open to vocational pupils in the agricultural schools and departments in Massachusetts has ended with the first two prizes going to our Essex County School.

The first winner, Nathan Clark of Swampscott, entitled his essay George Washington, the Farmer. Student Clark was awarded, for his excellence in historical points, agricultural correlation, and convincing ability, a prize of five dollars.

Winner of the second prize of three dollars was Student Carl Swanson of Rockport, whose essay was written on Our First American Farmer.

Honorable mention was also made of two other essays rating in the final elimination: those of William Costley, Lynn, a student of this School, and William May, a senior of the West Springfield High School.

Hockey

The hockey team has not been favored with the best of weather. However, three games have been edged in between thaws: Jan. 11, Haverhill, 3-5; Feb. 1, Wakefield, 0-3; Feb. 3, Lynn Classical, 0-0.

Now that winter is again slipping its traces, return games may or may not be played off. Coach Cartwright, nevertheless, anticipates a complete schedule, including matches with Marblehead and Stoneham, in addition to the aforementioned return games.

News of the School at a Glance

January 29

The Junior Prom was, as seems to be traditional, one of the School's marked social successes. Over 200 couples attended, with a large number of alumni.

February 12

The Senior dance, held so soon after that of the Juniors, was a distinct pleasure to the 200 dancers who attended. This dance culminates the class evening activities of the year.

February 16

Dean Dawn Nelson Wallace of Nasson Institute, Springvale, Maine, addressed the Homemaking girls, stressing the advantages of being thorough, earnest, and dependable, hence efficient.

February 17

A delightful program in commemoration of the two-hundredth anniversary of George Washington was presented by students at a joint assembly. Deserving of special note were the tableau "Betsey Ross" and a pageant "A Colonial Garden Party."

Honor Roll Homemaking Department

Of the eighty-nine students in the Homemaking Department, twenty-one were announced for the second term honor roll by the department head:

Seniors: Katherine Ingoldsby, Pauline Ramsey, Elaine Pingree.* *High School Specials:* Ruth Thomas, Marion Currier, Ruth Hall, Isabelle Shinner, Eileen Murphy,* Mary Kearns,* Rose Sacco,* *Juniors:* Cora Ballard, Nelda Bourdelais, Eileen Finch, Florence MacKenzie, Isabelle Pillsbury, Dorothy Poore, Janice Wray, Dorothy Williams, Anna Waters, Bernice Ogden.* *Freshmen:* Elizabeth McTague.

*Starred names signify honorable mention, denoting an "84 plus" average.

(Continued from page 2, col. 1)

H. B. Rowe, and Rollin H. Barrett of Massachusetts State College will illustrate, by reels, "Labor Saving Devices."

Guests may assemble in room 18, in the basement of the building, to hear Mrs. Bessie R. Buxton's horticultural lecture, "A Yankee's Experience in British Gardens." In addition Professor A. M. Davis will illustrate a talk entitled, "Landscape Gardening Applied to Home Beautification."

Exhibits prepared by all divisions of the Agricultural and Homemaking Departments, including the three extension departments, will be arranged for the purpose of helping citizens having problems along the lines of the School's endeavor in Agriculture and Homemaking.

Quality Varieties of Vegetables for the Table

Backyard gardeners or commercial growers will be satisfied with these varieties of vegetables for high quality:

Asparagus: Mary or Martha Washington.

Beans: Green bush, Bountiful; Wax bush, Sure Crop; Pole (green or wax), Kentucky Wonder; Shell, French Horticultural.

Beets: Crosby Egyptian.

Cabbage: Golden Acre; Copenhagen Market; Penn State Bald Head; Savoy.

Carrots: Chantenay; Nantes; Danvers Half Long; Hutchinson.

Caiflower: Snowball.

Celery: Golden Plume (New Wonderful); Boston Market; Giant Pascal.

Corn: Golden Bantam; Golden Sunshine; Whipple's Yellow.

Cucumbers: Davis Perfect; Arlington White Spine.

Lettuce: White Big Boston; New York No. 12 (Iceberg).

Onions: Yellow Globe Danvers; Yellow Danvers; Southport Globe; Japanese Onion Sets.

Parship: Hollow Crown; Model.

Peas: Record; Blue Bantam; Laxtonian; Telephone.

Peppers: Harris' Earliest, California Wonder, World Beater, all sweet; Squash, hot.

Radish: Scarlet Globe.

Spinach: Thick Leaf; Bloomsdale; Savoy; New Zealand.

Squash: Summer, Straightneck; Cozozella (Italian Marrow); Fall, Des Moines; Winter, Hubbard.

Tomatoes: Bonny Best; John Baer; Marglobe; Stone.

Turnip: Purple Top Milan; Purple Top Strap Leaf; Yellow Swede Rutabaga.

—C. M. Stearns,

Instructor in Vegetable Gardening.

Honor Roll Agricultural Department

Sixty-two of the two hundred and twenty agricultural students attained averages of honor roll quality for the second term. These are: *Seniors*: *Milton Snow, *Carl Swanson, *Carlton Brown, William Costley, *George Perkins, Sidney Batchelder, *Donald Bentley, George Bulgaris, Donald Driscoll, Richard Heider, Milton Huson, Walter Lewis, Robert Peterson, *Juniors*: *Michael Pickowicz, *Hyman Weinstein, Fred Anderson, Woodrow Follett, *George Sowryda, Lester Dixon, *Malcolm Spalding, *David Carter, *Nathan Clark, Arthur Bulgaris, *Olin Donnelly, *George Lambert, Frank Ray, James Hollins, *Caesar Rosi, *Arthur Peatman, Rob-

Suggestions for Marketing Eggs

It has been generally noticed that poultrymen of the Eastern States have their own viewpoint of the wholesaler's method of handling and grading eggs. But a great many of them never get the wholesaler's side of the situation.

A contrast between the packing and grading of local and western eggs was recently made by J. H. Vondell of the Massachusetts State College, when he visited a large egg house. The first difference noticed was in the appearance of the western eggs, which were packed in new, well-nailed cases; the local eggs were found in poorly-nailed and sometimes wired cases, although the express companies no longer demand that second-hand cases be wired.

The second contrast was found in the contents of these cases. Uniformity in color and consistency in packing with flats and fillers prevailed in the western eggs. The locals on the other hand lacked uniformity, both browns and whites being mixed and sizes running from 20 to 28 ounces per dozen.

It is so easy to get correct information on grading and packing eggs that it does not seem necessary that eastern poultrymen need to take the cut in returns and lose the confidence of buyers. The Railway Express Agency publishes a finished booklet on proper methods of packing eggs for express shipments. It is Mr. Vondell's suggestion that poultrymen get a copy of it to assure themselves that they are using the best system of packing and crating eggs.

As the result of a test conducted at this School, it has been reaffirmed that sterilization of the soil has materially reduced diseases affecting tomatoes. The experiment was conducted by Instructor C. M. Stearns of this School with the cooperation of Dr. O. C. Boyd, State Pathologist, Massachusetts State College.

ert Bartlett, Albert Doggart. *Sophomores*: *Dora Winchester, *Mortimer Brown, *Henry Richardson, Ralph Broughton, *Albert Nunan, Bernard Carleton, William Carnevale, *Edward Glowacki, *Thomas Swinarski, *Alfred Webb, *Alfred Caproni. *2d-Y Class*: *Dana Drew, Joseph Desmond, Virginia Larrabee, Kenneth Nolan, Kenneth Nunan, Melvin Westcott, Frank Cutting, Francis Brown, *Lucille Lagasse, Sidney Porter, *Franklin Edwards, *Benjamin Gregory, Bryce Ham, *Howard Stultz. *Freshmen*: *Philip Hanson, *Walter Licht, *Forrest Haynes, John Peatman, Gilbert Wallace, John Monroe.

*Starred names signify those of students on the first-term honor roll as well as the second.

Prune your Grapevine

Very few plants respond more generously to pruning than does the grapevine. In sections where grapes are grown in a large way, annual dormant pruning and training are considered indispensable. If we grow only a few vines we frequently forget that important job which is sure to help our vines.

Shaping and training the grapevine by pruning helps to keep it within manageable limits and to increase the vigor. By pruning, the quantity of fruit may be increased or diminished, the quality of fruit improved, wounded and diseased parts removed, and spraying and cultivation facilitated.

The ideal time for grapevine pruning is now approaching. Although pruning is practiced at any time during the dormant season (after the leaves fall and before the buds swell) late winter after danger from severe freezing is over and before April 1 is best. March is the best month, for after April 1 bleeding usually results. Summer pruning, although formerly followed, is not advised because it weakens the vines, delays maturity of the wood and fruit and tends to reduce the sugar content of the grapes.

Bunches of grapes are born on the shoots which develop from the wood of last season's growth (called canes). Last season's growth is identified by its brown color and smooth, close-fitting bark. The guiding principle in pruning the grapevine is to preserve just enough of last year's growth to yield a normal crop. All other parts should be removed. The amount of bearing wood left depends upon the system of training followed. Two to six canes per vine are usually left; each cane should have twelve or more buds. On a neglected vine more bearing wood than this should be left for the first year or two of annual pruning.

Upon request, the Essex County Agricultural School will supply anyone interested with literature on how to train grapevines upon the standard systems.

For the home grape grower the arbor or fence makes a satisfactory trellis, if one adheres to the above principle of pruning, and carefully spaces and ties up the bearing canes.

The canes should be tied up loosely with a soft string. Most of the cuts can be made with a good pair of hand pruning shears. In removing the pruned off parts from the trellis, care should be exercised not to injure the canes which are left to fruit. It is well to remember that if the vine is properly pruned much more wood is removed than is left.

—C. M. Wood,

Instructor in Fruit Growing.

Home Furnishing Project Instruction Given by Leaders

Two training groups of project leaders in the Home Furnishing Project have been organized in the county. One group, meeting in Haverhill is being instructed by Miss Grace B. Gerard, Extension Home Furnishings Specialist. Mrs. Mary McIntire is instructing the second group at the Essex County Agricultural School.

There are to be three meetings in the Home Furnishings Course: (1) Color in the Home; (2) Home-made Rugs; (3) Slip Covers.

The following women are acting as project leaders: Mrs. Alfred Tidd, Georgetown; Mrs. Horace Brown, Mrs. J. Spencer Poore, W. Newbury; Mrs. Howard F. Marshall, Mrs. Warren C. Dodge, Mrs. Ralph K. Porter, W. Haverhill; Mrs. Marion Costello, Miss Mary Donovan, Lawrence; Mrs. W. L. Dow, Miss Edna Williams, East Haverhill; Mrs. Alexander Price, Mrs. H. V. Bent, W. Boxford; Mrs. Earl Davis, Mrs. Ralph Milnes, Groveland; Mrs. E. T. Ostrander, Mrs. Harry Maynard, S. Lynnfield; Mrs. Charles Ives, Mrs. Charles Shirley, Topsfield; Mrs. Edward Russell, Mrs. Charles Tyacke, Lynnfield Center; Mrs. George Walton, Mrs. Marie Hamblett, Cliftondale; Miss Mary McGuigan, Miss Mary Kelley, Danvers; Miss Marion Parker, Mrs. Alvah Bradstreet, Mrs. W. G. Sanborn, Beverly; Mrs. Leo Fallon, Mrs. Josephine Parquette, North Andover; Mrs. Lillian Hill, Miss Germaine Leyte, Andover.

Dried Fruits

Prepared by MAY E. FOLEY,
Extension Nutritionist

Have you had your copper today?—this is a question that scientists are now asking. Liver is our best food source, but if you get a little tired of liver, why not try apricots? And they contain some iron, too. All dried fruits are particularly rich in minerals and roughage and some of the vitamins.

Raisins, prunes, peaches, apples, and apricots are the five major dried fruits in this country. Pears are beginning to become popular. Other dried fruits consumed in quantity are currants, dates, and figs.

In winter when fresh fruits are scarce, dried fruits are economical and vary and add interest to the day's meals.

We sometimes hear the remark that prunes at ten cents a pound or apricots at twenty cents are not inexpensive, but we need to remember that most of the moisture has been evaporated and we are paying for only concentrated food. After water is added and the fruit cooked, the bulk is greatly increased. The food value is then the same as an equal

Home Economics Around About the County in March

March 1—Methuen. Home Furnishing.
March 9—Hathorne. Farmers' and Homemakers' Day.
March 15—Hathorne. Advisory Council Meeting.
March 16—Topsfield. Clothing Renovation.
March 17—W. Boxford. Home Grounds Improvement.
March 18—Haverhill. Home Furnishing.
March 23—Methuen. Home Furnishing.
March 24—Saugus. Nutrition Class.
March 25—Hathorne. Operators of Wayside Stands.
March 28—Salem. Thought and Work Club.
March 30—Topsfield. Clothing Renovation.

Surprise for 4-H Clubs in Essex County

4-H boys and girls in Essex County have a treat in store late in June. On the 26th, the 4-H camp, originated last year, will welcome again campers whose interests include hobby hours, hiking, swimming, nature lore, and evenings around a real live campfire.

The decision to continue camp this year was due largely to last year's great success.

1932 plans are to make the camp an honorary one, implying that delegates be selected from each club, by club members wherever possible. One hundred campers will be this year's limit, allowing two from each club to spend a happy week in delightful surroundings. Preference will be given to members who have not previously attended camp, but if the quota has not been filled by the first of May others desiring to attend will be accepted.

All applications must be in the club agent's office on or before May 1.

amount of freshly cooked or canned fruits with juice. Raw fruit, of course, has some advantages over canned or dried fruits because none of the vitamin content is lost.

FRUIT ROLL

Roll dough to ¼-inch thickness. Spread with butter, brown sugar, and a bit of cinnamon, if the flavor is liked. Then the filling of 1 cup chopped tart apples, and ½ cup raisins. Roll as for jelly roll, press edges together, and place in baking pan. Bake ½ hour in moderate oven, basting several times (use 1 teaspoon butter, 2 tablespoons brown sugar, and 2 tablespoons water.) Serve hot or cold, in inch slices, with or without milk or whipped cream.

Meetings for Operators of Wayside Stands and Tea Rooms

Mrs. Harriet J. Haynes, State Home Management Specialist, is to conduct a series of meetings on "Wayside Stands" and "Tea Rooms" at the Essex County Agricultural School. There will be two all-day meetings on each subject. The meetings on "Wayside Stands" are March 25 and April 15; the meetings concerning "Tea Rooms" will be held on April 14 and May 5.

All operators of Wayside Stands, where food is sold will receive many valuable suggestions. Mrs. Haynes will discuss location of Wayside Stands, ways of making the stands attractive inside and out, questions of buying, advertising, signs, furnishings, etc. At the meeting on "Tea Rooms" she will discuss furnishings, food purchasing, food service, selection and arrangement of kitchen equipment.

All persons interested are invited to attend these meetings. Those planning to attend should bring a basket lunch. Coffee will be served. Please enroll for these meetings with the Home Demonstration Agent, Hathorne, Mass.

—Marion P. Crawford.

Local 4-H Leaders' Meeting

Mrs. Alvin T. Zink, Chairman of Section A, presided at the first sectional 4-H leaders' meeting held with Miss Forbes at the home of Mrs. Albrecht in Andover, February 9.

The meeting was a combined sectional and county-wide clothing leaders' meeting. Definite plans for the Essex County news-writing and dress contests were made in addition to a discussion of the county 4-H camp.

Enthusiasm was keen on the part of everyone as favorable and excellent suggestions for club activities were exchanged.

Miss Forbes announced that ten records have been selected for the Essex County music appreciation contest. The club agent is ready to lend these records to any club desiring to prepare for the contest.

Winners of both music appreciation and news-writing contests will be awarded a free trip to the Essex County 4-H camp in June.

Question: When is a good time to give cod liver oil?

Answer: Either before or after meals. Whenever the child prefers it. If taken before meals there is less after-taste, but on the other hand it sometimes takes the edge off the appetite.

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HATHORNE, MASS., MARCH, 1932

NO. 3

Scores Attend Farmers' Day

Guests approaching nine hundred in number attended the eighteenth annual Farmers' and Homemakers Day held March 9. The majority were present for the morning lecturer, Professor J. H. Frandsen, whose discussion and pictures of dairying in Denmark were of value and interest to all. Stressing cooperation between farmers, Professor Frandsen hit upon the secret of success among Danish agriculturists.

Sectional meetings held throughout the afternoon were all well attended. Dairymen learned that the amount of cream which comes to Boston from outside New England (52%) could be decreased with the passing of a milk control bill necessitating the sale of inspected milk only.

At a meeting of market gardeners the importance of control of carrot rust fly maggot, onion maggot, and thrips was discussed; green manure was stated as being the most important food for crops; the necessity of growing fresh crops high in quality was stressed; and labor-saving devices were illustrated.

The poultry section learned that a large variety of feeds is essential to chix, with wheat, oats, and corn as the primary basic feeds.

At a gathering of fruit growers, advice was suggested for the control of apple maggot with arsenical sprays in July and early August; cover spray was recommended for apple trees when the temperature is correct; and the following of spray charts recommended for growers charts recommended for growers who want to produce 90% clean fruit.

Interesting illustrated lectures on floriculture were enjoyed by many.

In addition to the lectures, educational and trade exhibits were on display in both the agricultural and homemaking departments. Miss Marion P. Crawford, Home Demonstration Agent, found scores of women interested in a market basket exhibit, depicting foods of value to fit the food budget.

Greetings --- Easter

Our Compliments to the Rabbit Breeders Association



Trees, The Oldest Living Things in the World

By C. S. WRIGHT
Instructor in Ornamental Gardening

The year 1932 finds many people advocating the planting of trees in memory of a great tree lover, George Washington, who lived in an age when trees were freely planted and protected.

In the year 1635 the Town of Boston passed an order to prevent trees planted in the settlement from being injured or spoiled. Many law cases were settled in favor of trees, and against those causing injury.

Today automobiles, trucks, gas leaks, and electric wires are some of the agents which injure and destroy trees but few lawsuits are settled in favor of them.

On March 27, 1913, the Massachusetts Tree Wardens and Foresters Association was organized to foster tree planting and tree care. This led to the appointment of tree agents in most of the towns and cities in our State. Their work speaks for itself. We notice it mostly when one of our friendly trees is being removed from its place on a corner.

A healthy tree, properly located and of twelve-inch diameter, is worth \$150. Such a tree requires food and

April 7—Date for Alumni

Did you ever have the longing to experience the thrill of that good old Aggie Spirit? To hear those cheers again as we sent the teams off to play the other schools? What a wonderful sight to see those fellows going out, full of pep and the old fighting spirit to win. Would not you like to see the old gang again in that same old snappy way?

Here's your opportunity! The Alumni is out to put a kick into the Athletic Association. We are making the start now with a bang-up good banquet so that the next season will run off with plenty of enthusiasm. This is your invitation to give vent to your pent-up Aggie Spirit.

Fun for all. A program full of songs and cheers and reminiscences of old times will be yours, and, to let you in on the last word we're going to have one of the best speakers on athletics of the day.

The spring dance will follow the banquet so make up your mind right now and send in your reservation for a good chicken banquet.

Help boost Dear Old Aggie. A boost you'll never regret.

Remember: April 7, 1932.

5.30 in Homemaking Building, Banquet 60c.

8.30 in Agricultural Hall, Dance 50c.

Special: Banquet and Dance ticket for \$1.00.

Send your reservations to the Secretary, Horace J. Shute, on or before March 31, 1932.

—H. J. S.

water. Its leaves contain from twenty to forty pounds of nitrogenous matter and from five to ten pounds of minerals, which, in the forest, are absorbed back by the trees. Not so when we destroy the leaves.

Plant a tree. Yes, more than one if your space is sufficient. This will surprise you with their growth and beauty.

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Horace J. Shute

Calendar

- March 25—School of Accounts for Instructors by F. E. Heald, Supervisor of Teacher Training in Massachusetts.
- March 25—Meeting for operators of Wayside Stands, supervised by Mrs. Harriet J. Haynes, State Specialist. Class starts at this School at 10.30 A. M.
- March 26—4-H Club Poultry Rally at the School.
- April 7—Banquet for Athletes and Alumni Spring Dance.
- April 14—All-day meeting for operators of tea rooms.
- April 22—4-H Charm School.

Two Essex Students Recognized in Public Speaking State Finals

The prize speaking contests sponsored yearly by the Future Farmers of America Association as a part of its educational program, reached the State finals at Hatfield, on Friday, March 11.

Six out of ten competing students of this School were chosen to represent the School in a District contest held Friday, March 4. Clarence Patterson, Peabody, and Alvin Courant of Gloucester took two of the three first places and hence were qualified for competition in the State contest, where Student Patterson was awarded \$10 for placing third, and Alvin Courant, \$5 in placing fourth.

Winner of the first place, Thomas Yeoman of the Norfolk County Agricultural School, will go on to the Regional Contest, representing Massachusetts, and if victorious there, will enter the National contest at Kansas City.

It will be remembered that last year R. Hugh Conn of Worcester North High made his mark in oratory by winning the National finals.

The 1932 Green and White

Friends and Alumni:

The 1932 edition of the "Green and White," the annual publication of the presiding senior class is in preparation.

We are making this edition one of the best ever published by any previous graduating class. Being a publication which will offer a complete resumé of the 1931-1932 activities at Essex Aggie, it will most certainly be of general interest to all.

In addition to the material entered by the various departments of the editorial staff, there will be included the photographs of the graduating class, in individual photos, group pictures of the staff, school orchestra, the athletic organizations and several other groups.

May we have your cooperation with material and subscriptions to make this periodical a success?

The Senior Class of 1932
Essex County Agricultural School

Alumni Notes

A new address recently sent in is that of Mrs. Wilfred Currier (Virginia O. Hazel, class of '22). She is now living at 68 Federal St., Springfield.

Eva Belcher, class of 1931, was one of a few who successfully completed the probation period at the Massachusetts General Hospital in January.

Richard Saunders of the class of 1930, who is market gardening on the farm of Maynard Tucker, a graduate of the 1920 class, visited the School in late February.

Moody Johnson, a former student of the School, is working at the Nation-Wide Store, Elm St., Danvers.

Richard Eustis, a student here in 1922 and 1923, and now in his Senior year at the University of New Hampshire, visited the School on February 26. Student Eustis made his mark in athletics, having been chosen captain of football last September.

Announcement was only recently made of the marriage of Mabelle Stoss, class of 1930, to Webster E. Morse of Salem. The ceremony was performed in Portsmouth, N. H., on January 22.

It is with sadness that we chronicle the death of Ernest Blaney, class of 1930, who died on Sunday, March 13.

Homemaking Iotas

The name of Elinor Bacon, class of 1931, has recently been placed on the Balfour Honor Plaque which hangs in the homemaking building. She is the third of the homemaking students to have won this honor through scholarship, loyalty, and achievement.

News of the School at a Glance

February 25-26

Of the ten competing students in the School elimination public speaking contest, sponsored annually by the Future Farmers of America Association, six were chosen to represent the School in a district contest, March 4. The first three, chosen by a committee of judges were: Clarence Patterson, Peabody; Alvin Courant, Gloucester; and Milton Snow, Lawrence. Alternates selected were: Virginia Larrabee, Beverly, Walter Lewis, Andover; and Hyman Weinstein, Salem. An account of the district and state contests are reported in this same issue as a special article.

March 9

Farmers' and Homemakers' Day had its eighteenth annual program with an attendance approaching nine hundred agricultural and homemaking enthusiasts.

March 11

Miss Caroline Wilson of the division of vocational education visited the homemaking department.

March 12

At a milk-judging contest held at Amherst, Chester Dunn, class of '33, placed first with 43.33 points. Walter Lewis, also of this School and a Senior, placed second. By placing eighth in the livestock judging, Student Lewis will enter the judging finals to be held at the Eastern States Exposition next fall.

March 15

W. S. Welles, head of the department of agricultural education at Massachusetts State College, visited instructors of this School in their classrooms.

March 16

Coins were picked out of the air as an amazed joint-assembly watched the feats of Dr. Brown, the magician. It was impressive during these days of depression.

A Balfour key has been sent to Miss Bacon as the personal insignia of her distinction.

Girls in the Senior class of the Homemaking Department have been divided into groups, each group planning, preparing, and serving dinners each noon, in family style, to members of the School faculty and staff. Service and planning of this kind seem extremely practical for girls whose duty it is apt to be to later assume the responsibilities of household assistants.

On Wednesdays of each week for a limited number of weeks, High School Specials served luncheons to the faculty and staff in tea-room style, offering menus which they themselves had selected as well as prepared.

Poultrymen—Profit By This

During the calendar year of 1931, one hundred and five poultry keepers of Essex County asked for assistance of the writer in solving the following problems: Coccidiosis (19 flocks); Fowl Pox (9); Intestinal Worms (8, four of which were tapeworms); Feeding (6); Organization (6); Range Paralysis (5); Source of Chicks (5); Source of Pullets (5); Housing (4); Laryngotracheitis, commonly known as "Infectious Bronchitis" (3); Tumors (3); Culling (3); Ruptured Ovary (3); Brooding (2); Pullorum (1); Cannibalism (1); Miscellaneous (22).

All cases of Pox could have been prevented by vaccination with a reliable source of vaccine. The most serious consequences in these flocks were loss of egg production during a season of good demand and highest prices.

Coccidiosis could have been prevented in many flocks by smaller brooding units, larger and cleaner ranges.

Intestinal worms, except tapeworms, were all found in flocks grown on small, bare ranges. The tapeworms suggest the need of storing droppings from old birds in screened manure pits as this parasite must have an intermediate host such as flies.

The feeding problems were caused by failure to follow manufacturers' directions, home mixed feeds incorrectly formulated, and adding undesirable supplements.

Organization problems resulted from lack of capital, training, or practical experience.

Serious losses followed buying chicks from states as far west as the Mississippi River, due to inferior stock or abuses in shipment, and in one case a subsequent laboratory culture showed Pullorum.

The three cases of Laryngotracheitis were all caused by buying adult stock in early winter from unknown sources and the total loss was in excess of 500 laying pullets.

One flock of 400 chicks when about one month old apparently developed coccidiosis. Post mortem showed shingle nails to be the cause of deaths.

The greatest amount of "grief" seems to me to be the result of crowding both young and old stock, and unsanitary conditions.

—J. E. Miltimore,
Poultry Instructor.

Boost Your Sales Contest

In order to stimulate a greater interest among the poultrymen of Massachusetts in the advantages of better merchandising of poultry and eggs; to increase consumption of Massachusetts poultry and eggs; and to determine and make available to more poultrymen the most successful

sales methods, the Massachusetts Federation of Poultry Associations is promoting a "Boost Your Sales Contest."

The Massachusetts Federation of Poultry Associations is offering \$30.00 in prize money—first prize \$15.00; second, \$10.00, and third, \$5.00.

The New England Poultryman is offering a special prize of \$45.00 worth of advertising space in the "New England Poultryman" magazine.

The Massachusetts Department of Agriculture is offering an additional \$10.00 for first prize and \$5.00 for second prize and a special silver trophy for the best window display.

Every contestant, whether winner or not, gains a twofold benefit: 1. His own business methods will be analyzed critically by himself; 2. Useful practices of some successful poultrymen may be made available through the committee.

The contest opened March first, and will close officially November 1, 1932. No formal entry blanks are required but a letter must be in the hands of the committee not later than November 1, stating that the writer is contesting and conforming to the contest terms. Prizes will be awarded to those having the best total score judged from (a) displays and posters; (b) advertising signs and other miscellaneous material; (c) description of merchandising process; (d) physical equipment and sales organization.

For further information address all inquiries to the "Boost Your Sales Contest" Committee: J. Kroeck, Chairman, 136 State House, Boston; E. B. Parmenter, Franklin; L. C. Parsons, 4 Park St., Boston.

Garden Lovers to Rally at Waltham

A two-day short course, to help those who from preference or necessity plant and care for their grounds themselves, will be conducted by the Massachusetts State College at the Waltham Field Station on Tuesday and Wednesday, April 5 and 6. Registration will begin at 9 A. M. The program will continue from 9.30 A. M. to 4.30 in the afternoon. Last year a similar course was attended by 700 persons.

The classes will be instructed in lawn making and maintenance; the culture of annual and perennial flowers, old and new; the proper use of shrubs and evergreens; soils; fertilizers, and the control of plant diseases and injurious insects. The pruning of shrubs and roses will be clearly explained by using plants themselves. The proper and effective arrangement of cut flowers will be demonstrated. These subjects will be discussed by men who are specialists in their particular field.

Books for the Poultrymen

For the convenience and interest of our readers, the *Farmer and Homemaker* will print, each month, names of books valuable in the manifold phases of agriculture.

If, at any time, questions arise concerning agricultural problems, the School earnestly solicits your inquiries.

This month's poultry list is suggested and recommended by J. Stanley Bennett, Poultry Instructor of the School.

Poultry Husbandry, by Jull; McGraw-Hill Book Company, 370 Seventh Avenue, New York City. *Practical Poultry Management*, by Rice and Botsford; Wiley and Sons, 440 Fourth Avenue, New York. *Judging Poultry for Production*, by Rice; Wiley and Sons. *Poultry Science and Practice*, by Waite; McGraw-Hill Book Company. *Practical Poultry Farming*, by Hurd; Macmillan Book Company, 240 Newbury St., Boston.

Bulletins:
"Preparation of Poultry for Market," No. 11; "Movable Colony Brooder House," No. 62; "Culling of Hens," No. 35; "Sanitary Range Shelter," No. 75; "Brooding and Rearing Chix," No. 63. The bulletins just listed are all Massachusetts Extension Leaflets, Massachusetts State College, Amherst, Mass., and may be obtained through the college. "Feeding and Management for Egg Yields" is Extension Bulletin No. 124, published at Connecticut Agricultural College, Storrs, Connecticut (Extension Department).

Crop Loan Law

The Reconstruction Finance Corporation Act recently passed by Congress authorizes the allocation of \$50,000,000 for the Secretary of Agriculture to use as loans on crop production. The county agent is the local representative of the Secretary of Agriculture in each county. He will select an advisory board consisting of one banker and two farmers, to pass upon all applications for loans from this fund. C. L. Cobb of Rock Hill, South Carolina, is in charge of the North Eastern Atlantic States.

Anyone desiring application for a loan should write to County Agent F. C. Smith, Hathorne, Mass., for the application form. A county seed loan committee is being formed which will be announced shortly.

There are no fees. The course is free to all who love gardens. A postal card addressed to Professor H. E. White, Field Station, Massachusetts State College, Waltham, Mass., will bring a program and full particulars.

It is suggested that you bring your own lunch. Coffee will be served.

Wanted: More Time

On March 9, in conjunction with Farmers' and Homemakers' Day, three hundred women heard Mrs. Harriet J. Haynes' solution to "Wanted: More Time." So that others may have the principle of this explanation we are printing the points enlisted by Mrs. Haynes as fundamental.

In order to make the most of those twenty-four hours allotted to homemakers, it is wise to divide them into eight hours for work, eight for leisure, and eight for sleep. One's standard of living quite naturally determines the length of the work day. Whether one spends it being homemaker or housekeeper is a second determining factor of "uttermost" importance.

Methods should be considered. Labor-saving equipment for constant use is a wise investment for keeping houses orderly. Equipment for special tasks, infrequently used, should be avoided.

Family cooperation is a factor which not only saves time but makes time pass more quickly.

In making time valuable it is well to plan definitely each day's work. Rest periods as well as elasticity periods should be listed. One's speed rate should be considered and enough time given to each task.

We were to value the homemakers' work in dollars and cents, according to Miss Margaret Justin, former President of the National Home Economics Association, we should set aside \$2200 yearly for the accomplishments of the homemaker. However, the value of homemaking lies not in monthly checks, but in the success of creating a confident family bond.

(Continued from page 1, col. 3)

In answer to the question which might arise: "What kind of tree shall I plant?" suggestions are many. Grafts of the original Washington Elm of Boston renown can be secured. The American elm, Chinese elm, sycamore, beech, maple, hawthorne, mountain ash; all are good, as are orchard trees bearing fruit.

Near Danvers square stands a beautiful tree in a side lot where, well-nourished and content, it smiles at passersby. It is a gingko, a fine specimen tree, originating in China.

A street without trees is barren and cold. A farmyard lacking trees is bitter. Mountains without trees would be incredible. A shade tree in the backyard is an asset. A fruit tree there is of greater value. With care and thought the planting of a tree is bound to bring lasting joy.

One remaining caution: Plant wisely in the front yard lest you live to see a great tree outgrow its location.

Attention—Wayside Stand Owners

The first all-day meeting for operators of wayside stands will be held at the Essex County Agricultural School on Friday, March 25, at 10.30 A. M. Anyone wishing to attend should notify Miss Marion P. Crawford at the School before that date.

The course is to be given by Mrs. Harriet J. Haynes, State Specialist in Home Management.

All are requested to bring their own lunches. Coffee will be served.

Sign Posts

Not one of the three hundred women who heard Mrs. Marion Rudkin's "Signposts," on Farmers' and Homemakers' Day, could wonder for a minute whether the speaker herself follows the markers by which women may become successful homemakers.

Mrs. Rudkin illustrated her Signposts with verses of such poets as Van Dyke and Daly.

And here they are. Each one leads to the success of the others:

Glorify Your Tasks.

Have an Understanding Heart.

Keep Your Sense of Proportion.

Enlarge Your Vision.

Keep Smiling.

Culmination of Basketball Season

Report by COACH P. H. COUHG

The School team has completed the sixteenth and last game of basketball for the season. With a number of plausible alibis such as sickness, ineligibility, and lack of personnel, the team struggled through a season of ten defeats and six wins.

The best part of the season was the first, when everyone was available and in good health. A close win over the Lynn Y Juniors, who later went on to win the Two-State Y Championship, and two successes over Norfolk were the highlights. The pleasant trips to Fitchburg and Haverhill were saddened a bit by complete defeats. A win and a loss to Marblehead, both games on the opponent's floor, gave the boys something to think about. The Lynn G. E. team also split home and home victories.

The prospects for next year are favorable with several Sophomores and Juniors available.

Facts

According to L. B. Boston, Director of Division of Fairs, State Department of Agriculture, the future of agricultural fairs in Massachusetts is assured through the increasing interest of the young people. He calls

Laundering Synthetic Fibers

To launder synthetic fibers, make a suds of hot water and neutral soap chips or flakes, adding cold water to make the temperature lukewarm. Squeeze the article under the surface of the water until the soil has been removed. Since all rayon fibers have a smooth finish, they are easily cleaned. Add more soap flakes if necessary to keep a live suds. Do not rub and do not lift the article by one edge with the weight of the garment hanging from it. To extract the water, squeeze the garment between the hands but avoid wringing. Roll the garment between bath towels and knead to absorb excessive moisture.

Celanelse may be ironed almost at once with a warm iron. If the garment is of hemberg it may be handled as silk, pressing it with an iron as hot as that used for cottons. Knitted rayons should be spread on a towel to finish drying.

Garments made of these fibers may be renewed by dry cleaning. Celanelse fabrics should not be treated with chloroform or ether.

The method of removing spots will be determined by the nature of the spot as well as by the characteristics of the material itself. As with all fabrics, the sooner a spot is removed, the better.

Home Nursing Courses in April

The Home Nursing courses, under the instruction of Mrs. Mary Roundy, R. N., will start about April 1. Plans are now being made for the scheduling of these classes which will consist of eight afternoon meetings. Practical demonstrations will be given at each, including healthful rules for living; bed making, occupied and unoccupied; bed baths; appliances and methods used in the sick room; bandaging; and common emergencies and first-aid.

One lesson on pre-natal, natal, and post-natal care will be given if desired.

attention to the fact that the number of exhibits by young people has increased more than ten per cent in the past two years and now constitutes nearly one third of all exhibits.

The House Bill 501, giving fruit growers rights to shoot the birds which eat the fruit buds of their apple trees in winter, has passed both branches of the legislature and has been signed by Governor Ely. The bill was introduced on petition of the Massachusetts Fruit Growers' Association and had the approval of the State Department of Agriculture, the Department of Conservation and of the sportsmen of the State.

ESSEX FARMER AND HOMEMAKER

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HATHORNE, MASS., APRIL, 1932

NO. 4

Farm Accounts—Their Value

Like any accounts, farm accounts have their value in providing a basis on which people may form their financial habits. The importance, particularly of farm accounts, lies in the analysis and interpretation of accounts, enabling farmers to base the next year's enterprises logically and beneficially.

According to J. A. Foord, Professor of Farm Management at Massachusetts State College, who recently spoke at this School during a conference on farm and project accounting for vocational instructors, a uniform method of keeping accounts should be formed for every phase of agriculture. He advised that students in vocational agricultural schools keep farm accounts of their summer projects, with all schools using uniform books. It is important, he said, to allow quite leniently for the misfortunes which are bound to befall even the best regulated farms. Credits and debits should be accounted for in distinct columns, and plainly labelled.

F. H. Branch, Extension Economist in Farm Management, of Massachusetts State College, recommended the keeping of exact accounts in the most simplified form possible. Intricate accounts are apt to arouse complications.

Facts submitted at the conference by Instructors A. L. Dacy, G. A. Cooley, and G. A. Meigs, of this School, embodied the conclusion that only such facts and figures on farm accounts are valuable which are of nearby and recent origin. Sources of information concerning farm products and farm management in general, should be sought with care when one considers what a bearing they have on budgeting and interpreting wisely farm accounts.

Essex County Beautiful

The picture below exemplifies the lasting beauty of an Essex County farm, known especially as the home of Rebecca Nurse, a victim of the Sa-



REBECCA NURSE HOUSE

lem Witchcraft tragedy. People seldom realize that the forty acres of land now surrounding the house, devoted to market gardening, were formerly a tract of more than a hundred acres of farm land tilled by the combined efforts of the Nurse family and their descendants.

Preserved because of its historic interest, the Nurse home is equally valuable for its quaint, old beauty, standing ruggedly on a slight incline, seeming to defy the injustices which befell its Mistress.

It is just this sort of Essex County beauty that the Garden Club of America is trying to sustain, in addition to preserving natural sanctuaries for birds, historic trees, woods, and reservations wherein wild animals may have the refuge and freedom which nature once allotted them.

The village of West Boxford has shown its civic pride and served as an example to the rest of Essex County with its recently won fourth place in the "Beautiful America Contest."

It is an earnest plea that extends throughout Essex County from Andover to Rockport and from Amesbury to Nahant, urging county-wide pride through practical ways and means of protecting the scenic and historic beauty.

Mrs. Gordon Abbott of Boston and

(Continued on page 4, col. 2)

Hints To Beekeepers

Those who have not already obtained bees for pollinization of their fruit trees should get in touch with local beekeepers or put in a late order for package bees at once, as it is desirable to have the bees in the orchard about a week before the expected blooming time. If the weather is at all inclement, provisions should be made for feeding the bees previous to the blooming.

The mistake is sometimes made of opening the colonies too early in the spring. Unless it is known from previous falls' check-ups that a colony should be looked at, it is the best policy to leave it entirely alone until the period of fruit bloom.

However, early attention should be given to weak colonies. They should be built up at once, either by uniting them with other weak colonies or by adding queenless packages of bees. After uniting or adding bees, the food supply must be kept up. For this purpose a syrup should be made of equal parts of granulated sugar and water and as much should be given as the bees will use, until the honey flow comes.

Beekeepers who have not given their bees this needed attention thus far this spring, should do so at once, because bees have been more active during the recent mild winter than they would have been during a cold one. Thus those colonies whose stores were rather meager last fall may be in a fair way to perish for want of stores this spring because of the large amounts needed for feeding the brood in building up a colony before the first important honey flow. Brood rearing this year commenced in early February.

All dead colonies should be burned and equipment stored where it cannot be reached by marauding bees.

—G. A. MEIGS.

**BETTER
HOMES
DAY**

**JUNE
8**

**4-H CLUB FIELD DAY
JUNE 4**

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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Calendar

- April 25—May 2—Homemaking recess.
- April 29—Classroom instruction in Agricultural Department ends for the year.
- May 3—Annual Meeting of the Women's Extension Service.
- May 4—4-H School for Personality to be held at this School.
- May 5—Second all-day Meeting for Operators of Tea Rooms conducted under the auspices of the Women's Extension Department, by Mrs. Harriet J. Haynes, State Home Management Specialist.
- May 21—County-wide 4-H Dress Contest.
- June 4—Annual 4-H Club Field Day at this School.
- June 8—Better Homes Day, with Margaret Slattery as main speaker.

Garden, Nutrition and Canning Letters

The specialists from Massachusetts State College are planning to send out, this year, informational letters for those interested in planting the garden, using the vegetables in the diet, and preserving garden products. The letter is especially intended for all those who perhaps for the first time have a need for this information. There are many men with reduced incomes who are now turning to the backyard garden with the idea of helping out the food budget both this summer and next winter. To these particularly will our letters be helpful. All wishing to receive these garden, nutrition, and canning letters, which will be published at monthly intervals, should send their names to Miss Marion P. Crawford, Home Demonstration Agent, Hathorne.

Alumni Notes

Miss Ruth Kirby of Beverly, class of 1930, was married on March 22, to Mr. Walter H. Daehler. Mr. and Mrs. Daehler are "at home" at 23 Fairview Ave., Beverly.

On Friday, April 1, a daughter was born to Mr. and Mrs. Earl Blake of Peabody. Mr. Blake was a graduate of this School's class of 1930. Twelve hours following the birth of Mr. Blake's daughter, his brother, Warren H. Blake, became the happy father of a son.

Mr. and Mrs. Clarence Hilton of Danvers recently announced the engagement of their daughter, Miriam, class of 1929, to George B. Moulton, Jr., also of Danvers. After receiving her diploma from this School, Miss Hilton studied at, and graduated from the Boston School of Occupational Therapy, and is employed at the Danvers State Hospital as occupational therapist.

Miss Jean Blake, of the class of 1923, who has been at the Essex County Sanatorium for shortly over a year, would welcome visits or correspondence from any of her classmates and friends.

Announcement has been made of the marriage, on March 28, of Miss Bernice Walsh, class of 1930, to Francis Sharples of Lawrence. The couple will make their home in New York City.

Donald Williams, class of 1930, has recently been appointed assistant poultryman at Llewysac Lodge in Bedford, Mass., where there are 5,000 layers, and 10,000 baby chicks. His address is Llewysac Lodge, Bedford, Mass., care of Mr. John Rhodes.

Tuberculosis Eradication Extending Among County Herds

Recent figures from the Bureau of Animal Industry show that the cattle population of the Commonwealth is 207,128 and that 54% of these are now TB tested. In 1931 the average salvage received was \$19.23; the average State Indemnity paid was: purebreds, \$62.73; grades, \$41.90.

The maximum State Indemnity on grades is now \$50 and on purebreds \$75. Essex County stands fourth in the percentage of cow population under test. Barnstable 100%; Franklin, 80% tested; Berkshire 77% and Essex 60% tested. However these figures are changing overnight. Lawrence recently sent in its petition, as did Groveland. All towns except Salisbury and Newbury in the northern part of Essex County now have petitions on file.

News of the School at a Glance

April 4

Miss Marjory Warren, General Secretary of the Travelers' Aid Society of Boston, explained to members of the staff and faculty the aim and development of that society.

April 7

An athletic banquet, sponsored by the School's alumni association, went a long way in displaying the loyalty to the School of alumni and students. Nearly one hundred and fifty guests enjoyed the banquet prepared by the homemaking department, as they did the greetings, toasts, and speeches of Director Smith, Everett Jones, President of the Alumni Association, members of the School faculty and staff, and Coach Joseph McKenney of Boston College. It was a happy occasion, followed by the annual spring dance for alumni members.

April 8

At a student joint assembly, Charles F. Whitney, artist and naturalist, illustrated, with chalk sketches, experiences which are worthwhile as an avocation. Bird study being one of Mr. Whitney's hobbies, his subject was particularly appropriate for students of this School. Not only did he tell of the particular bird habits which he himself has discovered, but carried his entertainment to a delightful degree by showing the students simplified ways of sketching birds in any pose.

Varying his talk with brief legends and true tales of birds, the speaker added to his hearers' pleasure by sketching in black and white, chalk representations of landscapes and birds.

Green and White Editors

The Editorial Staff of the Seniors' publication, the "Green and White," includes: Editor-in-Chief, William Costley; Associate Editor, Pauline Ramsey; Business Managers, Donald Bentley, Alvin Courant; Exchange Editors, William Chase, Eileen Murphy; Alumni Editors, Kenneth L. Sprague, Rita Welch; Art Editors, Loring Clark, Katherine Kolhonen, Athletic Editors, George Perkins, Emma Bourdelais; Joke Editors, Frank Sowa, Elizabeth O'Brien; Advisory Staff, Mr. Carlton Stearns, Mr. George Gifford, Miss Margaret Harris, Miss Verna Clark.

—Kenneth L. Sprague,
Alumni Editor.

BETTER HOMES DAY JUNE 8

Poultrymen—Save This List of Dates

Following is a list of the 1932 holidays of greatest interest to poultrymen, together with the best marketing days for each holiday. On these days the products in general demand are broilers, fowl, turkeys, pigeons, squab, geese, capon, rabbits, duck, and chicken.

Holiday

Purim, March 22-23
Passover, April 20-21, sunset
Easter, March 27
Last Passover, April 29, sunset
Feast of Weeks, June 9-11
Decoration Day, May 30
Independence Day, July 4
Jewish New Year, sunset, Sept. 30-Oct. 2
Day of Atonement, Oct. 10
Feast of Tabernacles, Oct. 15-16
Feast of Law, October 22
Thanksgiving, November 24
Christmas, December 25
New Year, January 1, 1933
Harvest Day, January 23

Best Marketing Days

March 18-19
April 16-18-19
March 22-23-24
April 23-24-26
June 7-8-9
May 26-27-28
June 30 and July 1-2
September 27-28-29
October 5-6-7
October 11-12-13
October 18-19
November 18-19-21
December 21-22-23
December 28-29-30
January 16-17-18

Rural Electrification

Electric power company officials met farmers, farmers' wives, and members of the Extension Service at this School, Thursday, March 31, for an all-day session. The greatest harmony prevailed. Professor C. I. Gunness, W. C. Harrington, and Mrs. A. T. Herr of the Massachusetts State College and F. L. Rimback of the New England Power Company presented their own valuable points of view regarding the question of rural electrification.

A County Committee on Rural Electrification was organized to study the needs of extensions, the kinds and makers of equipment, cost of equipment, and cost of operation compared with other forms of power. The members of this Committee are: Chairman, F. C. Smith; Secretary, Miss Marion P. Crawford; C. B. Hodgson, manager of the Beverly Gas and Electric Company; Harold Crompton, Lawrence Gas and Electric Company; Melville Gray, Wenham; John Chadwick, West Roxford; George

Dow, Salisbury; Albert Maines, "Essex County Farmer"; Mrs. Leon Hardy, West Andover; Mrs. Hazen Richardson, Middleton. Those interested are requested to get in touch with the chairman of this committee for advice on rural electrification problems.

—F. C. S.

How Can Farmers Make Money?

How can owners of small farms make profits without buying or renting more land? The production per unit answers this question. That is: per cow, per hen, per acre.

62 Mass. vegetable garden farms.		
Crop prod. of ar.	Net labor income	Labor income per veg. acre
77	\$755	\$48
93	\$3230	\$130
118	\$2795	\$128
Apple Orchards (8 year average)		
	Labor income	
Less than 80%	\$70	
80 to 119%	\$353	
120 up	\$1108	

Dairying

lbs. milk per cow per day	Labor income
9 lbs. for all in herd	\$165
13	\$755
15	\$975
20	\$1405

150 New Jersey POULTRY farms			
No. eggs per daily	Ar. net or labor inc. per farm	Ar. net or labor inc. per operator	
100 hens			
12	505	Loss	\$176
18	673	Loss	\$67
24	650		\$312
29	785		\$775
34	717		\$1173
42	808		\$1823

In other words, to make money now, each hen, each cow, each acre, each man must produce more per unit than the average.

—F. C. Smith.

Facts

Arrangements have been made with Instructor George Cooley of this School to try out, during 1932, some of the newer legumes and forage plants. He is cooperating with the County Agent F. C. Smith, and Professor Ralph Donaldson of Massachusetts State College in growing Lespedeza, a legume said to grow well on acid soil. He is also experimenting with ladino and dalea clovers.

Conrad Tronerud of Topsfield is conducting a demonstration on the value of different materials or fertilizers used for top-dressing his meadow.

Thirteen fruit growers in Essex County have enrolled in the 90% Clean Apple Club this spring. It is hoped that all will be eligible. At

Books for Fruit Growers

Believing that suggestions in agricultural literature may prove of interest and value to our readers, the *Farmer and Homemaker* prints its second list of books, recommended by C. M. Wood, Instructor in Fruit Growing:

Orchard and Small Fruit Culture, by Auchter and Knapp; Wiley and Sons, Publishers, 440 Fourth Ave., N. Y. *Orcharding*, by Gardner, Bradford, and Hooker; McGraw-Hill, 370 Seventh Ave., N. Y. *American Fruits*, by Fraser; Orange-Judd, 15 East 26th St., N. Y. *Commercial Apple Industry in the U. S.*, by Folger and Thomas; Macmillan Publishing Company, 230 Newbury St., Boston. *Fruit Growing*, by Chandler; Houghton-Mifflin Company, 4 Park St., Boston, Mass. *Spraying, Dusting and Fumigating*, by Mason Freeman; Macmillan Company. *Textbook of Pomology*, by Gourley; Macmillan Company. *Manual of Fruit Insects*, by Singerland and Crosby; Macmillan Company. *Productive Small Fruit Culture*, by F. C. Sears; J. B. Lippincott, 1249-57 S. Wabash Ave., Chicago, Illinois.

Bulletins:

"Grape Growing in Massachusetts," Massachusetts Extension Leaflet No. 64, Massachusetts State College, Amherst, Mass.; "Planting and Care of Commercial Apple Orchard," Cornell Extension Bulletin No. 75, Extension Department, Cornell University, Ithaca, N. Y.; "Strawberry Culture," Farmers Bulletin No. 1028, Office of Publication, U. S. Department of Agriculture, Washington, D. C. The remaining bulletins listed are also obtainable at the Office of Publication, U. S. Department of Agriculture, Washington, D. C. "Raspberry Culture," Farmers Bulletin No. 807; "Blackberry Growing," Farmers Bulletin No. 1399; "Apple Growing East of the Mississippi," Farmers Bulletin No. 1360; "Pear and How to Grow It," Farmers Bulletin No. 482.

present, Archer Pierce of Peabody is the sole Essex County member.

Massachusetts has been proven to have more disease-free poultry flocks than any other state.

Your lawn should receive some fertilizer high in nitrogen this spring; if it is thin, reseeding will help establish a good turf and choke out weeds.

Eggs are the cheapest in 20 years; they may be preserved for several months in water glass or lime water. Your home demonstration agent can tell you about those methods.

A new publication prepared by Professor William C. Monahan, and entitled "Turkey Production" (Leaflet 140), is available free of charge at the Massachusetts State College, Amherst.

Operators of Wayside Stands Receive Practical Suggestions

Women from twelve different towns in Essex County have been receiving help from Mrs. Harriet J. Haynes, Home Management Specialist, Massachusetts State College, in the methods of conducting Wayside Stands. These women are either operators of Wayside Stands or are planning to open stands in the near future. Mrs. Haynes gave many valuable suggestions.

She believes that the first thing to be considered when starting a stand is its location. The location should be considered from the standpoint of the kind and amount of traffic that will pass the door.

An easy approach to the stand is one of the best aids to a good business that it is possible to get. The stand should be seen from either direction of approach for about 500 feet. Sufficient warning should be given the motorist so that he can come to an easy stop in front of the stand.

A stand midway on a hill is not the best location. A stand at the fork in a road is good, since it can be seen from a distance and draws trade from several highways. Stands built on curves should be built on the inside of the bend, since the approach is easier.

A name, to be a good selling agent, must be distinctive, easy to say and easy to remember.

Beauty around the stand should be an expression of the owner's pride. The building should be of good proportions and painted an attractive color that will make it fit into its natural setting. The grounds surrounding, should be neat and clean.

Mrs. Haynes stressed the arrangement of the working centers. The table, sink, range, and cupboards should be arranged to save steps and eliminate waste motions. The working center should always be immaculate at any time that it could stand inspection at that time.

As for the menus in wayside stands, a basis should be made to estimate the cost of all food sold, including the cost of labor, materials, overhead, and product. Records should likewise be kept, systematically and regularly.

It is essential to find out what the public wants, in planning menus. Specialties are good sellers, if you can make a particular product better than anyone else.

One should live up to a standard, having that standard of superior quality.

Color in foods, and products in season are most attractive.

It is wise to be near a market place if possible, in order to supply fresh products always.

In planning for new equipment, purchase not for this year alone, but with future needs in mind.

Be sure to allow for shrinkage of foods after cooking, and waste. This is an important factor in figuring costs and profits.

Food Preservation

Professor W. R. Cole, Extension Specialist in Food Preservation, Massachusetts State College, has given Essex County three afternoon dates for a demonstration in the canning of fruits, vegetables, jams, and jellies. Professor Cole feels that there is a great saving made in food preservation. He will especially emphasize this year the economy in canning the surplus from the garden. He says: "When you can buy a can of string beans at the store which costs you fifteen cents cash, this is what you pay for: Cost of beans and can, \$.05; putting the beans into the can, \$.05; getting the beans to you, \$.05. Total \$.15. The actual cash cost of canning home-grown beans is as follows: Cost of can (tin or glass), \$.03; cost of fuel, \$.02; total, \$.05. Doesn't this saving make pretty good wages?"

Professor Cole's demonstrations will be given, free to all, at the following places on these dates: May 18, Boys' Club of Lynn, 25 North Common St., Lynn; May 19, Parker Hall, Newbury; May 20, Lawrence Gas and Electric, Sargent Building, Methuen St., Lawrence.

Annual Meeting

The Annual Meeting of the Women's Section of Essex County Extension department will be held at the Essex County Agricultural School on Tuesday, May 3rd.

This meeting is made up of members of the advisory council, community extension committees, and project leaders.

Reports for the past year will be submitted, and plans for the coming year discussed.

(Continued from p. 1, col. 2)

Manchester is chairman of a committee sponsoring this beautification drive. Representatives of the committee in nearly all the county's towns have been appointed to give advice and receive suggestions from anyone interested in preserving or improving a particular Essex County haunt.

Garden Clubs - 4-H

Garden club work is being organized in twenty Essex County towns. Every boy and girl with room for a garden (500 square feet or more) is urged to join the 4-H garden clubs. Last year there were 223 members who completed the garden project, and their combined projects totalled over twenty-three acres of land planted. The cost of seed and fertilizer was \$1,771.70. They received for their crops \$4,715.41, which represents the value received for produce used at home or sold.

This is a challenge to every boy to help out the family budget and raise a garden which he will be proud of.

Applications for enrollment will be distributed within everyone's reach through this School or through local leaders in each town.

Join now.

Viola Messer, 4-H Delegate to Washington

On June 13, Viola Messer, Junior leader in 4-H Club work, of Methuen, will go to Washington to the National 4-H camp, as a delegate, chosen because of her never-failing interest in club work. Due to her past accomplishments and her pep to go on, the executive committee of Local Leaders Association voted Viola the most outstanding Junior leader in Essex County.

Her achievements have been many. With seven years membership in 4-H clubs, she has since become a Junior leader, with four years of this work now behind her. Starting with a lunch box club in a two-room school at Marsh Corner, Methuen, she became successful in preparing the necessary menus on a stereo heater which the club purchased to be used as a cook stove.

From that year with her little group she has been an outstanding leader. Each year she doubled her previous years' work, thereby doubling the value of her results.

4-H delegates are sent yearly from each state and Hawaii (two girls and two boys), to this National camp. The camp is filled with inspirational programs, and visits to all points of interest in Washington are made by the campers during their week's stay.

Viola will meet her party of "4-Hers" in Springfield, whence they will journey together to Washington. A dream come true.

4-H DRESS CONTEST MAY 21

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 13

HATHORNE, MASS., MAY, 1932

NO. 5

Poultry Hints

By J. E. MILTMORE
Instructor in Poultry

Many interesting and valuable lessons were learned by the fourteen students carrying on poultry projects under my supervision during 1931.

A total of 4727 chicks were brooded with an average mortality of 7.5% to maturity or to approximately six months of age. As nine of these students had had no previous experience the mortality record was quite satisfactory and yet a careful checking of causes of losses reveals a preventable mortality of nearly half the total. The greatest loss followed unfavorable brooding temperatures. Thirty-six (or 1.6%) chicks were eliminated in this manner. One student lost 90 chicks from chilling which occurred before delivery and were fully replaced.

Twelve students used coal-burning brooder stoves, the remaining two using oil for fuel. Incidentally, the highest percentage of chicks raised, (97.6%), were raised under an oil brooder. All students chose the Rhode Island Red breed, but in addition one compared them with White Rocks and another tried White Wyandottes. Eleven strains of Rhode Island Reds were purchased, nine from Essex County breeders and all pullorum free flocks. Seven brands of commercial feeds were used and one student mixed some of his own with excellent success and a slight saving.

Ten of the flocks were vaccinated and all remained free from Fowl Pox during the fall and winter. Two of the four flocks not vaccinated contracted Fowl Pox and one later suffered over 60% mortality from *Laryngotracheitis*.

Coccidiosis claimed 1.03% of the losses and one flock developed a chronic case that has caused considerable loss in the laying house. In this case the brooder house was used

(Continued on page 2, col. 1)

The Development of a 1930 Project

(The first of a series of project articles)

This is only a handful of the 1600 baby chicks Saul Shtrumpfman has



SAUL SHTRUMPFMAN

on his poultry farm in Andover. Starting with 1200 chicks on his Senior project in 1930, Saul raised 475 pullets his first summer and built a two-decker laying house with grain storage rooms.

His land, covering five and a half acres, formerly a spreading pine grove, was broken up, and so cleared that room was made for the laying house and four brooder houses as well, with feeding hoppers plentifully scattered round about.

There are 1600 chicks now, and 400 yearlings raised purely for egg production.

Half an acre has been plowed for strawberry raising this summer. Vegetables for the chicks will also be raised, and now visions of a fruit orchard, to be set out on the farthest side of his property, are rising in Saul's mind.

One hardly needs go West—and back a century ago—to find pioneer spirit, when right here in Essex County a young man starts clearing the land to start farming for himself.

**Parents' Day
Homemaking Department
All Day
Wednesday, June 22**

(see article page 2)

Insect Control

Prepared by C. M. STEARNS
Instructor in Vegetable Gardening

CONTROL OF THE CUT WORM

Cut worms at this time of year are very troublesome, doing considerable damage to tomatoes, peppers, egg plants, and many flower seedlings, as well as enjoying satisfactory meals on asparagus. The latter damage is recognized by the small holes eaten into the sides of the stocks. When cut worms effect the small plants that have just been set out, the stock is cut off, either completely or partially so, near the surface of the ground. On the small scale, satisfactory results have been found by placing a small paper band or collar about the stem of the

plant, inserting it into the ground for at least one inch and letting it rise several inches high above the ground. Probably the best remedy for controlling the cut worm is poison bait made by mixing two level tablespoons of lead arsenic or Paris green with five pounds of dry bran, and a cupful of cheap, strong-smelling molasses, mixed along with enough water to make the bran sticky but not wet. Scatter this mixture over the top of the ground in late afternoon or early evening so that the cut worms may feed on this bait. Several days later the mixture may be applied again if satisfactory results were not obtained with the first application.

CABBAGE MAGGOT

For late early plantings of cabbage apply $\frac{1}{2}$ ounce corrosive sublimate to five gallons of water; dissolve the corrosive sublimate in warm water as it is more readily soluble and then add the five gallons of water. Apply one-third cupful to small seedlings about one week after they have been set in the field, and repeat one week later. If this method is followed out, 90% control measures should be realized.

(Continued on page 2, col. 3)

Essex Farmer and Homemaker

HATHORNE, MASS.

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Calendar

- May 21—4-H County-wide dress contest at the School.
June 4—Annual 4-H Field Day.
June 4—Rabbit Breeders' Association Auto Tour.
June 8—Better Homes Day.
June 22—Parents' Day.
June 24—Class-room instruction in Homemaking Department ends for the year.
June 26-July 2—County 4-H Club camp at Boxford.

POULTRY HINTS

(Continued from page 1, col. 1)

two seasons on the same location with a small board sun porch.

Rats destroyed 30 chicks in one flock where the brooder set close enough to the ground to furnish a safe hiding and breeding place.

Cannibalism accounted for a total loss of 29. These chicks were lost before going on range, but at least four flocks, after housing in the fall and steadily all winter, have persisted in eating feathers and occasionally each other. Early separation of sexes to prevent crowding, brooding in units of 250, prompt removal of slow feathering individuals and those birds showing vicious, mean dispositions should help to prevent this difficulty.

Seventeen chicks smothered. Most students prevented trouble in this form by removing hover and installing roosts with one-half or one-inch mesh wire under roosts and over roost supports.

Only one student with good range conditions failed to house 40% good pullets. The greatest single factor in the production of quality pullets was the use of large, shady, clean-sodded ranges.

Summer school at Massachusetts State College has been discontinued for 1932.

Alumni Notes

Former student Edward James Hopping is now employed as gardener on the estate of Major Patton in Hamilton. He visited the School on April 25th.

Lawrence Westcott, class of 1931, has recently been appointed cow-tester of the Essex County Cow Testing Association.

Julia Bruce, class of 1930, is employed as head waitress at the Homestead Country Club in Danvers.

Rose Sacco, class of 1932, has been released to work as student dietician at the Essex County Tuberculosis Sanatorium in Middleton.

Announcement has been made of the marriage of two alumni: Miss Madolyn Doyle, class of '29, to Raymond J. Turner, also of '29, on April 19. They are at home on Elm Street, Haverhill. Mr. Turner is in the employ of Trustee Robert H. Sawyer.

A son, George R., was born on April 13 to Mr. and Mrs. Hugh Parkhurst of Gloucester. Mr. Parkhurst, a graduate of the class of 1923, is operating a combination poultry and fruit farm in Gloucester and managing, as well, overnight cabins for tourists.

Honor Roll

Following is the homemaking honor roll for the term ending April 25th:

High School Specials: Marion Currier, Ruth Hall, Mary Kearns, Eileen Murphy, Rose Sacco, Isabella Shiner, Ruth Thomas, and Janet Brander (Honorable Mention).

Seniors: Katherine Ingoldsby, Elaine Pingree and Pauline Ramsey.

Juniors: Cora Ballard, Nelda Bourdelais, Eileen Finch, Irene Macdonald, Bernice Ogden, Isabelle Pillsbury, Dorothy Poore, Adaire Townsend, Janice Wray, Anna Waters, Dorothy Williams, Florence McKenzie (Honorable Mention) and Frances O'Brien (Honorable Mention).

Freshmen: Elizabeth McTague, Evelyn Cail (Honorable Mention), Grace Pramas (Honorable Mention), Victoria Townsend (Honorable Mention), and Viola Townes (Honorable Mention).

Honorable mention signifies an average just below the 85 average required for the honor roll.

An official record for production has been completed by a cow in the herd of S. M. Merrill of Ipswich, which entitles her to entry in the Advanced Register of the American Guernsey Cattle Club, Peterboro, N. H. This animal is two-year-old Argilla Delann 263434 with a production of 9645.4 pounds of milk and 508.7 pounds of fat in Class G.

News of the School at a Glance

April 20

Miss Lilian Guilford, representing the Children's Convalescent Home in Wellesley Hills, told students of the Homemaking Department details concerning the nursery maid's training course.

May 2

Dr. Grace A. Kent, head psychiatrist at the Danvers State Hospital, spoke to members of the faculty and staff on the value of mental aptitude testing as she sees it. In her opinion, both the test of special achievement in a special line of school work, and the test of general ability, have places of importance in educational fields.

May 3

Seniors and High School Specials in the Homemaking Department prepared and served a luncheon to the sixty women who attended an all-day annual business meeting of the Women's Extension Department.

Parents' Day

Parents' Day, to which all parents and friends of the homemaking students are cordially invited, holds in store an abundance of activities, showing results of the work carried on during the school year.

The date is Wednesday, June 22. At 11 o'clock a fashion parade will start off the program. Box lunches may be enjoyed on the campus at noon. At two o'clock a speaker will be followed by a student program.

Plan to come in the morning and stay all day.

Remember the date—Wednesday, June 22.

INSECT CONTROL

(Continued from page 1, col. 3)

POTATO BEETLE

On very small patches, hand-picking of slugs or beetles might be practical, but for larger plantings arsenate of lead or Paris green are the best remedies. Severe infestations will probably be best controlled by the use of this poison alone, and yet it is to advantage to use Bordeaux mixture along with the arsenate to aid in the control of early and late blights. There are commercial preparations in the market that contain both of these ingredients which may be purchased and used satisfactorily. Of course, potato blight requires four or five applications of Bordeaux mixture and potato beetle will require two to three applications of arsenate, depending on the severity of infestations as well as weather conditions. If you have difficulty with these insects, or others, why not get in touch with the Agricultural School and let us help you out of your trouble?

Professor C. M. Hilliard Cites Importance of Milk to Health

By J. E. EASTWOOD

Professor C. M. Hilliard, of Simmons College, gave an interesting and instructive lecture to the evening dairy classes at the School early in May. His talk emphasized the importance of the clean and sanitary handling of milk and other dairy products in order that the danger of contamination be reduced to a minimum. Laboratory tests, as the means of finding undesirable conditions of milk were recommended by Professor Hilliard, with the belief that the danger of sickness through infected milk could be reduced.

Various diseases that might be carried in milk were discussed and it was shown very conclusively that once a disease germ made its entrance into milk it could be spread rapidly to a large number of persons. Pasteurization was listed as one of the means of killing undesirable germs.

The Brom-Cresol test might well be used, he said, as a guide for picking out milk from individual cows to determine udder conditions, but is unsatisfactory when used for mixed milk.

County Agent F. C. Smith has received information from the American Jersey Cattle Club that provisions have been made that purebred Jerseys past two years of age may be registered, for a limited time, at a fee of \$5.00 instead of \$10.00.

This temporary reduction was made by the national organization because of its appreciation of the present financial conditions of the country and in order that many worthy purebred Jerseys which have not been registered, may now be registered at this saving to their owners.

School Recipient of Tree on Arbor Day

A tall slender birch, donated on Arbor Day by Director F. A. Smith, now adorns the south side of the School campus by the "old red house." The tree, a small seedling when brought from New Hampshire by Mr. Smith eight years ago, has been cultivated in his nursery until now it stands twelve feet tall—too delicate to be pompous, yet proud, and elusive.

Facts

Forsythia bushes which have been neglected and have too much wood do not blossom heavily. If you want your bushes to be covered with bloom next year, from the ground to the top, prune them this year, after all the blossoms have fallen. Take out the old wood, at the bottom of the bush, not the top. Leave enough to keep the shape of the shrub; you can depend on new wood for a good bit of next year's bush. Spirea can be treated in the same way.

An official record of production has been completed by a cow in the herd of S. M. Merrill of Ipswich which entitles her to entry in the Advanced Register of the American Guernsey Cattle Club, Peterboro, N. H. This animal is five-year-old Palotterrie of High Rock 187483 with a record of 1749.2 pounds of milk and 913.9 pounds of fat in class A.

L. B. Boston, Director of the Division of Fairs, states that the major fairs in Massachusetts have arranged their dates. Topsfield is scheduled for September 7-10, and Brockton, September 13-17. All dates, printed in a small folder, may be secured on application to the Division of Fairs, State Department of Agriculture.

A Bookshelf for Gardeners

Trusting that the lists of book titles printed in the last two issues of this publication have been of value to the readers, we include the following list for the gardener's bookshelf, recommended by H. Linwood White, Instructor in Floriculture:

"One Thousand and One Garden Questions Answered," by Alfred C. Hottes; De La Mare, Publishers.
 "Rock Garden Primer," by Archie Thornton; De La Mare.
 "Milady's House Plants," by F. E. Palmer; De La Mare.
 "Adventures in Dish Gardening," by Miss Patten Beard.
 "The Lawn," by Lawrence S. Dickinson; Orange-Judd, Publishers.
 "The Book of Shrubs," by Alfred Hottes; De La Mare.
 "A Little Book of Climbing Plants," Alfred Hottes; De La Mare.
 "The Book of Perennials," by Alfred Hottes; De La Mare.
 "The Book of Annuals," by Alfred C. Hottes; De La Mare.
 "Spring Flowering Bulbs," by Clark L. Thayer; Orange-Judd.
 "The Cactus Book," by A. D. Houghton, Macmillan.
 "Modern Dahlia Culture," by W. H. Waite; De La Mare.
 "The Gladiolus and Its Culture," by A. C. Beal; Orange-Judd.
 "The Iris," by John C. Wister; Orange-Judd.
 "Garden Lilies," by Isabella Preston; Orange-Judd.
 "The Principles of Flower Arrangement," by Edward A. White; De La Mare.
 "Home Gardener's Pronouncing Dictionary," by Alfred Hottes, Meredith Publishing Company, Des Moines, Iowa.
 "Peonies in the Little Garden," by Mrs. Edward Harding; Little, Brown, Publishers.
 "How to Grow Roses," by Robert Pyle; Macmillan.
 "Landscaping the Small Home," by Edward W. Oliver; De La Mare.

There are, of course, other equally good books, the names of which will be sent if requested through Mr. White.

Weather Summary

JANUARY-APRIL 1932

	Jan.	Feb.	Mar.	April
Maximum temperature	65°	48°	61°	75°
Minimum temperature	13°	6°	10°	24°
Mean daily temperature	35.2°	26.5°	32.8°	45.3°
Five-year average ('27-'31)	26.7°	27.5°	36.5°	44.9°
Least daily range	3°	3°	5°	3°
Greatest daily range	30°	26°	28°	35°
Precipitation	4.93"	2.61"	5.20"	1.72"
Five-year average ('27-'31)	2.79"	3.19"	2.77"	3.75"
Excess for year to date	+2.14"	+1.56"	3.99"	1.96"
Average relative humidity (8 A. M.)	75.8%	71.0%	63.7%	60.4%
Number days rain fell	15	11	9	7
Clear days	7	11	11	12
Partly cloudy days	8	5	10	8
Cloudy days	16	13	10	10
Total hours sunshine	91.5	131.5	188	214.5
Five-year average ('27-'31)	156.5	144.6	195.2	219.6
Per cent sunshine	31.2%	43.0%	50.9%	53.6%
Snowfall	8"	13.5"	6.5"	trace
Five-year average	9.8"	13.9"	4.2"	1.8"

The year 1932 began with a month which was abnormal in several ways. The temperature averaged nearly 9° above normal and the highest temperature in the month was not again equalled until late in April. The winter of 1931-32 goes into the records as the first one in a great many years when no zero temperature was recorded.

The sunshine in January was far below the normal and has not equalled the 5-year average in any one of the four months to date.

County Extension Workers Hold Annual Meeting

The Annual Meeting of the Women's Section of the Essex County Extension Department, including members of the advisory council, community Extension committees, and project leaders, was held on May 3. The business meeting, conducted by Mrs. Earl Bessom, chairman, was followed by a report given by Miss Crawford on Extension work dating back to 1927. Her comparisons of activities in 1927 with those in 1931 are interesting in their development. 410 women of 28 Essex County communities worked in Extension groups in 1927, compared with 1,869 from 47 communities in 1931. 76 meetings held in 1927 were increased to 199 in 1931. Attending these meetings in 1927 were 1,009 women, while 3,000 were present in 1931. 1,043 circular letters were sent out in 1927, while 1931 claimed 14,090. Such figures show with what rapidity works of real service inevitably increase.

New members voted into the Advisory Council were: Mrs. William Wells, Marblehead; Miss Maidee Polleys, Essex; and Mrs. John W. Henderson, West Andover.

A new constitution for the Extension Service was read and accepted by members. It was decided that the Nutrition project be stressed next year.

In the afternoon plans for the future were discussed by Mrs. Annette T. Herr, State Leader of Home Demonstration Agents, and a play entitled "George and Martha Come Back," was presented by a group of Danvers women.

Operators of Tea Rooms Helped by Home Management Specialist

Women in the county have recently received practical help through Mrs. Harriet J. Haynes, Home Management Specialist, in the methods of conducting successful Tea Rooms.

Outstanding in her managerial ability, Mrs. Haynes advised with authority, the most fitting location for tea rooms, arrangement of kitchens to the best advantage, a standard on which women may base their menus, equipment, and advantageous ways of buying, preparing, and serving foods.

She stressed the vital necessity of sanitary conditions in tea rooms, and qualified that all workers and waitresses be suitably and neatly attired.

The Home Demonstration Agent and Mrs. Haynes recently spent a day visiting proprietors of Tea Rooms and Wayside Stands in Essex County. Suggestions were given on the arrangement of kitchen equipment, suitable furnishings, and signs.



SWIMMING AT 4-H CLUB CAMP

Margaret Slattery on Better Homes Day Program

Women of the Essex County Extension Service, and their friends, are once more invited to attend Better Homes Day in June, at the Essex County Agricultural School. On Wednesday, the 8th, the morning program will open at ten o'clock with a short business meeting and reports by Miss Crawford.

Professor A. M. Davis, of the Massachusetts State College, will follow, with a lecture of intense interest, entitled, "Do You Enjoy Your Garden?"

Miss Mary Pozzi, Assistant Home Economics Specialist, of Massachusetts State College, plans to conduct a series of in and out-of-door games for old and young. These games may be used at parties, played by families, or at any public gathering.

The Extension Department has been exceedingly fortunate in securing for the afternoon speaker, Miss Margaret Slattery, widely-known speaker, whose subject will be, "Making a Living and a Life."

There will be the usual exhibits, showing the type of work the women of the Extension Department have been doing during the past year. These will include Home Nursing, Home Furnishing, Nutrition, and an Out-of-Door Living Room.

All Essex County homemakers are cordially invited to attend.

Exhibits will be on display at 9.00 o'clock. The afternoon program is scheduled to begin at 1.15.

Ice cream and milk will be on sale at lunch time.

Children will be cared for by students of the Homemaking Department.

Anyone desiring further information on the subject of tea rooms may apply to Miss Crawford at the School for the material prepared by Mrs. Haynes.

4-H Members Prick Up Your Ears

Is swimming your favorite sport? Or do you like games best? Or hiking? I knew I was wrong. Camp fires: everyone likes those best. Fires in the evening, with campers circled 'round. Stories and marshmallows—and ideals. All of these, to say nothing of nature study and handicraft, are parts of each day's program at Essex County's 4-H camp.

This is to be its second season. For one whole week, June 26 until July 2, any bona fide Essex County 4-H member who has satisfactorily completed one club year may obtain membership to the camp by applying to Horace J. Shute, County Club Leader, Hathorne.

Applications must be in not later than June 1.

Look at the picture above and make up your mind to hop into that pond yourself this summer.

Happiness prevails at the 4-H camp, and a more ideal location than the Happy Health Camp in Boxford could not be found.

The County Club Leader left Saturday, May 21, for a week's course at the Springfield Y. M. C. A. college camp, to study camp administration.

Valuable Garden, Canning and Nutrition Information on Request

Garden, Canning, and Nutrition letters are being sent out through the women's Extension Service to 200 people in the county. Copies will be sent to anyone on request to Miss Marion P. Crawford, Hathorne.

These letters contain valuable information on how to plan the home garden for five people (amount of seed, probable yield, and distribution as to use, whether fresh, canned or stored).

ESSEX FARMER AND HOMEMAKER

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NO. 6

The Flower Business

In periods of depression prepare for prosperity. This is a good time for those who are growing, or who propose growing, cut flowers, potted plants and nursery stock to lay careful plans for taking full advantage of the upturn in business whenever and wherever it occurs. It is evident that a considerable number of growers in Essex County are doing this very thing. It is just as evident that people's interest in beautiful home surroundings was never stronger. People have been buying plants and flowers, but cautiously and in smaller quantities. With the returning tide of prosperity these people are going to resume their customary seasonal purchases of florists' and plantmen's products. They may even buy more than previously. Again, if growers but extend their sales efforts there will be reached the multitude of home owners and renters who thus far have not been made to feel the necessity of possessing more than a few shrubs, an evergreen or so, a fringe of perennials, or a bed of annuals.

Once this sentiment is stirred to action, I have no fear of the multiplicity of plant and flower growing establishments in Essex County. They cannot all survive, any more than can all grocery stores survive. But, just as the so-called "neighborhood grocer" performs a special and important function as a purveyor of foodstuffs, so the "neighborhood florist" tempts and caters to a host of people who would not otherwise venture an investment in the beautiful. The selling power of displays of goods within the customer's arm-reach is an accepted fact. Florists' and nurserymen's wares at every important cross-roads and along the traffic lanes serve but to tantalize, intrigue, and finally captivate more folks in the undeniably commendable pursuit of beauty about and in their homes.

(Continued on page 4, col. 3)

Over Six Hundred Attend Better Homes Day

More than six hundred women from nearly every town in Essex County, met on June 8 with Miss Ma-



See-saws and sandpiles on the School grounds, and toys made in Child Care Classes of the Homemaking Department, provided fun for the tots on Better Homes Day.

rian P. Crawford, County Home Demonstration Agent, at the eighth annual Better Homes Day held yearly at the Essex County Agricultural School in Hathorne.

Miss Marion Parker, Secretary of the Advisory Council, presided at a business meeting held in the morning.

Greetings were extended by F. A. Smith, Director of the School, who stressed the significance of Extension Service in the county. It was with regret that Mr. Smith announced to the audience the resignation of Miss Crawford as Home Demonstration Agent, which will take effect Sept. 1. Miss Crawford, whose interest has kept her working loyally in the School and county for many years, has made Extension Service grow to maturity from its stage of infancy when she was appointed Home Demonstration Agent nine years ago. Projects have been undertaken as needs have arisen. During a clothing project one of the earlier projects started—a romper pattern became so useful and so nearly indispensable in the homes of young mothers, that it was sent as far away as Alaska, and then to missionaries in China. Nutrition projects followed, as did Home Management, Wayside Stands and Tea

(Continued on page 4, col. 1)

The Fruit Business is Picking Up

Years ago, when the orchard was used as a pasture, the animals picked up and consumed large quantities of the windfalls or "drops." Although the fruit grower was not aware of the fact, pasturing animals in the orchard aided greatly in producing hand-picked apples free from blemishes. In consuming the drops, the animals destroyed large quantities of insects which were passing part of their life history within the flesh of the apple and which in some stage produced blemishes on the fruit.

Today the fruit grower keeps his pasture and orchard separate, so this valuable means of pest control is lacking. The present-day fruit grower can, however, continue this same idea of control.

By Picking Up by Hand

and destroying the drops, the life cycle of the insects within the apples is stopped and there will be no further trouble from these insects. And if the practice is followed regularly, fewer and fewer of the insects will exist. If, on the other hand, the insects within the fruit are allowed to mature, they will produce many fruit blemishes in the current and following years.

Each adult female insect usually lays hundreds of eggs, each one of which means a blemish. Besides these blemishes, the insects cause feeding punctures, which, too, are serious blemishes. Every egg-laying adult killed in the larva stage means hundreds less blemishes on the fruits at harvest time the following year. Plum curculio and apple maggot (railroad worm) are the two most troublesome insects of the apple, both of which spend part of their life history in drop apples upon the ground. Apples which contain curculio larvae start to fall from the trees about the middle of June; apples which contain maggots start to fall in July and continue through

(Continued on page 2, col. 1)

Essex Farmer and Homemaker

HATHORNE, MASS.

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Horace J. Shute

Calendar

June 22—Parents' Day, Homemaking Department.
June 24—Homemaking Department closes.
June 26 to July 2—4-H Camp at Boxford.
July 24 to August 6—State 4-H Camp, Amherst.
July 25 to 29—Conference week at Amherst.
July 26 to 29—Farmers week at Massachusetts College.

FRUIT BUSINESS IS PICKING UP (Continued from page 1, col. 3)

August. Drops containing curculio should be picked up twice a week, and those containing maggots should be picked up more frequently. A good way to kill the insects is to bury the drops in a pit saturated with waste crank-case oil, or put them in a covered barrel with a small quantity of oil. Some large fruit growers have been forced to use this means of control to supplement their careful spray program. The grower with only a few trees cannot afford to neglect this method of insect control.

Other supplementary means of pest control consist of cutting down the neglected apple trees, for they act as harboring places for many insects. The insects bred on the neglected trees and infest the cared-for trees. Trash, brush-piles, and hedgerows are used as hibernating places by many insects, and these should be cleaned up regularly by cutting and burning.

This picking-up business should not be confined to apples only. Drop pears, peaches, plums, and other fruits are sources of insect infestations, and the cause of many cull fruit.

C. M. WOOD,
Instructor in Fruit Growing.

JUNE 26 to JULY 2 4-H CAMP IN BOXFORD

Alumni Notes

Of interest to the alumni comes news of the marriage on June 22 of Alton Perkins, class of 1923, to Miss Thelma Savage of Peabody. Mr. Perkins has, for the past year, been Instructor of Science at this School. Mrs. Perkins is one of this year's graduates of the Teachers College of Salem.

Mrs. Stanley P. Newhall (formerly Lucille Gardner, class of '24) has moved from Gloucester to 43 Spring Street, Lexington.

Philip Armitage, class of '27, is employed as gardener on the estate of Lawrence Doty, Little's Point, Swampscott.

Herbert Kirk, class of 1930, is doing nursery work on the Ideal Farm in Westfield, New Jersey.

Donald Anderson, class of 1923, is managing the New York State egg laying contest. Mr. Anderson is employed as poultry instructor at Farmingdale Institute, Long Island, New York.

It has been reported that David Fisher, class of 1931, is employed at the Rhodes Riding School, Saugus.

Everett Fisher, former student, and brother of David, is in the employ of Mr. Horak, a Lynn florist.

F. F. A. Camp in September

There has been much agitation among nearly all the school boys who hope to be able to attend the F. F. A. camp for a week in September, at Boxford. Whether the second or third week is most suitable has not yet been settled. Final decision will be made by the executive committee of the F. F. A. All the boys who have been questioned by Mr. Metcalf, Mr. Eastwood, or Mr. Coubig, have been enthusiastic in their anticipation of a good time. All school boys who are members of the F. F. A., or those anxious to become members, are eligible to enroll for the camp. Total enrollment will probably approach 70. Instructors of the school are anxious to receive definite word from as many as possible as to their intentions. With the cost of board and room at only six dollars, most of the boys will feel that camp will not be too costly.

P. H. COUBIG.

Engaged

An announcement has recently been made of the engagement of Miss Edith Kierstead, a former employee of this School, to Reverend Henry Weston. Both are graduates, this June, of the Newton Theological School. The wedding date will be set in August.

News of the School at a Glance

May 27

Girls of the Homemaking Department commemorated Memorial Day on Friday with a program devoted to songs and recitations. An essay, giving the origin and purpose for observing Memorial Day was read by Dorothy Williams of the Junior Class. Patriotic poems, written following the Civil and World Wars were read, and in closing, the school sang "The Star Spangled Banner."

June 4

Nearly a thousand 4-H club members gathered at the School for their annual Field Day.

Of the seventeen towns and cities represented, Andover and Haverhill held the distinction of carrying first and second places, with the greatest total of points accredited for skill in judging and sports contests.

Winner of first place in a song contest was the Beverly Pioneer Food Club, and it was voted that Methuen displayed the most original stunt.

June 6

Mrs. Gordon Abbot, whose summer home is in Manchester, discussed with the faculty and staff the purpose of a recently organized committee which is attempting the study and preservation of Essex County beauty. During the present stage of development, people, roused by the committee's incentive, are listing trees, in inventory, as public property. Thus it is hoped that more care will be taken in preserving trees and other objects of beauty.

June 8

Over six hundred women attended the eighth annual Better Homes Day held at this School under the auspices of the Essex County Women's Extension Service.

Thoroughness in Spraying

In visiting those who are enrolled in the 90 Per Cent Club, I am impressed with the need of thoroughness. A Bordeaux nozzle gives too coarse a spray. A disc nozzle is better. And two nozzles are better than one. Have the one point downward and the second at an angle, so that the spray shoots upward to get the under side of the leaves. And don't forget the tops of the trees. Be a monkey and climb the tree to see how well the top is being covered. A ten-foot rod is necessary and you will likely need to cover the top of the tree from the spray rig. If the top is well covered, then the lower leaves will generally get enough drip to cover them. At least four gallons to a fifteen-year-old tree is desirable.

F. C. SMITH,
County Agent.

Pigeon Pox and Fowl Pox Vaccine

At the present time both pigeon pox and fowl pox vaccine are being offered on the market for vaccinating chickens against fowl pox. It may seem strange to think that pigeon pox vaccine may be used to prevent a natural outbreak of fowl pox in poultry, but such is the case.

Pigeon pox vaccine is obtained by inoculating pigeons with fowl pox, and then the scabs obtained from the pigeons are treated to obtain a vaccine which is weaker but apparently as effective as fowl pox vaccine.

When fowl pox vaccine is used on laying birds it usually sets them back severely; but in Virginia some work was conducted on laying hens, using the pigeon pox vaccine, with no resultant loss of production. However, in Massachusetts the fowl pox vaccine, properly applied to pullets on the range previous to coming into production, has given excellent results and is recommended for the current season *except* in the following cases:

1. When birds are housed and laying at the time of vaccination.
 2. When vaccination is being practiced on a place for the first time and no pox has ever been known there.
 3. When a natural outbreak of pox occurs and it is desired to keep it from spreading.
 4. When and if vaccinating birds not in the best of condition.
- In the above four cases, pigeon pox vaccine is recommended.

J. STANLEY BENNETT,
Instructor in Poultry.

Facts

Cyanimid Destroys Bearers of Disease Organisms

Cyanimid, in addition to supplying nitrogen and lime to crops, aids in the control of insects and disease organisms.

The United States Department of Agriculture has made use of Cyanimid in experiments in the destruction of fly larvae in horse manure. Cyanimid was scattered evenly over the manure and the mixture was thoroughly wetted down with water.

Essex County Bull Wins Honors

A pure bred Guernsey bull bred by Frank P. Frazier of Ipswich has been honored by being entered in the Advanced Register of the American Guernsey Cattle Club, Peterboro, N. H., two of his daughters having completed official records of production. The bull, Upland's Ultra Lad 58289, owned by T. D. Salley & Son, of Madison, Maine, is the sire of Ledgewood's Pansy 179257 with a record of 11,476.3

(Continued on col. 3)

Railroad Worm

In Essex County this pest has been increasing. Control comes only by July spraying. Watch for flies from June 28 to July 7. Where the maggots were plentiful last year apply two July sprays about July 7 to 10 and July 25 to 28. Where few railroad flies are present, one spray in July may be used about July 16 or 18.

Third Cover Spray. Dry Mix Sulphur; lime, 25 pounds; lead arsenate, 3 pounds to 100 gallons of water. Or use a 90-10 dust (sulphur and lead).

Fourth Cover Spray. Last of July. Arsenate of lead, 2 pounds per 100 gallons water, or dust; 90 parts lime and 10 parts arsenate of lead. This should control not only the apple maggot but the late brood codling moth.

F. C. SMITH,
County Agent.

The Mexican Bean Beetle

The first discovery of the Mexican bean beetle was in southern Berkshire County in 1929. Since that time it has worked its way throughout many sections of southern Massachusetts, but has not, as yet, become prevalent in Essex County. However, conditions point toward its spreading here.

This insect is primarily a bean pest, attacking the foliage of the common beans, including bush and pole varieties of snap beans. When they are found abundantly the insects attack the pods and stems. In extreme cases it also feeds on alfalfa, clover, grasses and weeds.

This beetle belongs to a group of beetles known as lady beetles. The adult, a quarter inch long, is pale yellow in color when newly emerged, with eight small black spots on each wing. The color darkens as they grow older and often becomes dark copper color. The larvae are bright yellow in color and are covered with numerous branched black spines. The full grown larvae are about three-eighths of an inch long. When this pest becomes serious, a spray or dust should be applied. Magnesium arsenate has been found not to be injurious to the foliage. The Massachusetts State College recommends the following: Magnesium arsenate, 3 pounds; calcium caseinate, 2 pounds; water, 100 gallons. Or, for a dust, use magnesium arsenate, 1 pound; hydrated lime, 5 pounds.

These insecticides should be applied to the under side of the leaves about once in every ten days, beginning as soon as the eggs become numerous on the plant. Late planted beans will escape the over winter females and thus avoid considerable injury.

A. G. PERKINS.

The Vegetable Gardener's Bookshelf

Continuing the list of books published monthly in this column, suggestions for the vegetable gardener's bookshelf is printed below:

Vegetable Gardening, by Watts.—Orange-Judd Company.

Vegetable Crops, by Thompson—McGraw-Hill Book Company.

The Vegetable Industry, by Jones and Ensweiler—McGraw-Hill.

Productive Vegetable Gardening, by Lloyd—Lippincott, publishers.

Vegetable Growing, by Knott—Lea and Febiger.

Practical Vegetable Culture, by A. Wilkinson—De La Mare Company.

Manual of Vegetable Garden Diseases, by Chupp—Macmillan Company.

Truck Crop Plants, by Jones and Rosa—McGraw-Hill.

Vegetable Faring, by R. L. Watts—Orange-Judd.

Bulletins obtainable from the Massachusetts Extension Service, Amherst, include the "How to Grow" series, which, in turn, include: Asparagus (leaflet No. 49); Carrots (No. 61); Corn (No. 102); Onions (No. 108); Peas (No. 97); Rhubarb (No. 46); Spinach (No. 99); Tomatoes (No. 51); Pumpkins and Squash (No. 101).

Magazines of interest are: The Bi-monthly Journal of the Market Gardeners Field Station, Waltham, Mass., and The Market Growers Journal, published in Louisville, Kentucky, by the Market Growers Journal Company.

Massachusetts the Sweetest

Recent reports from the National Lime Association shows that the Commonwealth of Massachusetts used the largest amount of lime per acre of crop land of any state in the union. There was an average of 138 pounds of lime oxide for each crop acre applied in 1931. This is twice that of the nearest competitor, New Jersey, with 69 pounds. Rhode Island is next with 53, and Connecticut has 53. Pennsylvania used 32.8, and Kentucky 32.5 pounds.

Ground limestone was used most commonly: limestone screenings next; then hydrated lime, marl, and burnt lime.

F. C. SMITH.

(Continued from col. 1)

pounds of milk and 571.5 pounds of fat in class A, and Ledgewood's Arlene 162697 with a record of 11,869.4 pounds of milk and 612.3 pounds of fat in class A. The bull also has twenty-one registered daughters and fourteen registered sons.

BETTER HOMES DAY

(Continued from page 1, col. 2)

Rooms, Home Care and Hygiene, Child Development, Home Grounds Improvement, and Recreation Projects.

Mrs. Annette T. Herr, State Home Demonstration Leader, appearing on the program, laid stress on the importance of broadening the work of the Extension Department throughout the county, emphasizing public welfare versus public utilities.

Miss Verna Payson, representing the Department of Vocational Education, cited instances wherein the Extension Service and her department co-operate.

Professor A. M. Davis, of the Massachusetts State College, in lecturing on gardens, challenged homemakers to so construct their gardens that they may be enjoyed by the family entire. A garden, he said, may be a place to sit and think in, a playground for the children, or an attractive nook in which to breakfast or lunch. A garden arranged for exhibit, to illustrate his point, had a border of perennial and annual flowers set close against a background of favorable trees. The trees insure privacy, the flowers enjoyment.

Miss Mary Pozzi, Assistant Home Economics Specialist, of Massachusetts State College, closed the morning program with gay suggestions for family and community recreations and games.

With a knowledge of understanding, so rare in many, yet so vivid in herself, Miss Margaret Slattery, speaker of the afternoon, transposed the most commonplace into the ideal with a faith so secure that not one could disbelieve that "making a living—and a life" depend entirely one upon the other. Letters of credit, she said, cannot make life, or human-kindness, or love. Gold is not the means of living—but an aid.

Golden Rule Dinner

The following menu, containing many practical suggestions for low-cost meals, was prepared by Miss May E. Foley, State Nutrition Specialist, for a Golden Rule Sunday dinner:

Meat Stew with Vegetables.
Whole Wheat Bread.
Indian Pudding.
Milk for children.
Coffee for adults.

Meat Stew with Vegetables

Any combination may be used, as: Mutton (2 lbs. neck, plate or shoulder), 2 lbs. potatoes, 6 onions.
Veal (3 lbs. neck, rib, knuckle, breast, or shoulder), 5 potatoes, 2 onions, ½ lb. salt pork slices.
Beef (1½ lbs. shank, neck, plate, flank, rump or brisket), 1 small

4-H Activities for Older Girls in Essex County

From a recent report of Miss Marion E. Forbes, Assistant State Club Leader in Massachusetts, the following information was submitted on the subject: Activities for Older Girls in Massachusetts.

The challenge was made to meet the needs of girls from 16 to 21. These suggestions were made.

Girls may assist in offering improvements in the recently established 4-H Charm School, whose purpose is to create charm in dress, in manners, and in voice.

The 4-H Courtesy program offers interest to the older girl, as does a Room Improvement project.

Older girls may become 4-H Junior leaders. Many may become active in 4-H Service Clubs, 4-H Beautiful Clubs, and Camp Gilbert this year is to be a two-weeks leadership training camp for older boys and girls.

Advanced clothing programs may be entered into, as can the home economics contest.

Discussion groups may be formed for older girls concerning health, friendship, literature, or whatever subject seems pleasing.

Gift meetings, for making simple Christmas gifts, have been suggested.

And lastly, several towns' clubs are combining in monthly community club meetings with older boys and girls as officers.

Spraying Conditions

Scab started off early, but the dry weather has held it in check. Now with rainy weather there will be real danger from scab. Hence a second cover spray is imperative.

Yes, there were two hot days in succession after the Calyx spray. And the curculio is with us. And with further hot weather there will be a greater need of the second and perhaps a third cover spray.

Second Cover Spray may cause burning, so the best authorities advise the Dry Mixx Sulphur: lime, 25 pounds to 100 gallons of water, with 5 pounds of Dry Arsenate of Lead, or, if using dust apply 85 parts sulphur, 15 parts of lead.

The second cover spray should come after the temperature gets up to 75° F. for two days in succession, probably about June 25th, or two weeks after the first cover spray.

onion, ½ cup each carrots and turnips, 4 cups tomatoes.
Pork (1 lb. butt), 4 large carrots, 4 large parsnips, 1 small red cabbage.

Indian Pudding

4 tablespoons cornmeal

THE FLOWER BUSINESS

(Continued from page 1, col. 1)

Admittedly, it would be unwise, even if it were natural, that all flower growers should follow a single pattern in the organization and conduct of their affairs. In a business so intricate in its ramifications great latitude is exercised by its adherents, yet, there is constantly and increasingly recurring type of setup that offers the well-informed man and trained beginner especially an opportunity to discover his capabilities while protecting him against his weaknesses and the vicissitudes of the times. This type of establishment is that of the combined retail cut flower and potted plant grower and nurseryman.

Location where things are humming is of prime importance. Land below the level of the highway, or sloping gently upward from the roadside, the better to expose the outdoor stock-in-trade, is invaluable. A greenhouse or two set well back on the property paralleled to the road, quite visible to passers-by, easily reached by a wide, curving driveway with inviting entrances at either end, and encircling a deep, perfectly planned, perpetually planted, and well-kept show and sales ground between the greenhouse and road constitute an economical unit. Hot beds and cold frames at one end of the house and a nursery at the other complete the layout. Sales seasons are short, temporary, inexperienced helpers function best under close supervision; customers expect instantaneous and rapid service and appreciate obtaining a wide variety of ornamental plants, winter and summer. Catering in this manner to a discriminating public redounds to the satisfaction and prosperity of the grower. The diversity of his products keeps him profitably employed the months around: the compactness of his establishment saves miles of travel for him and his employees and aids in the economical dispatch of business at its May peak.

After all, that grower prospers who grows only what he can sell, anticipates customers' wants, shifts his crops and plan of operation to conform to current gardening trends, pays as he goes, puts surplus earnings back into the business, and keeps his overhead down to essentials.

4 cups milk
3 tablespoons sugar
¼ cup raisins
1 tablespoon molasses
¼ teaspoon ginger
¼ teaspoon cinnamon

Cook cornmeal in scalded milk twenty minutes in double boiler, add other ingredients and bake in slow oven, 300 degrees, from 1½ to 2 hours.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 13

HATHORNE, MASS., JULY, 1932.

NO. 7

Hardy Phlox

By HAROLD C. STEVENS

One of the most popular of garden perennials is Phlox Decussata, and it deserves to be classed as one of the most valuable of all hardy plants. Blooming at a time when color in the perennial bed or border is lacking, it serves to brighten the garden during July and August when few other perennials are in flower. For this reason alone it certainly should be regarded as one of the indispensables, and ought to be given a prominent place in every garden of hardy flowers. While phlox will do well in any ordinary garden soil, it is at its best when growing in a deep rich loam, and when grown under favorable conditions it will produce large trusses of bloom which will provide a showy mass of color. The roots may be set out either in the fall or spring, although April is probably the best time of year to plant them. A mistake often made when using phlox as a perennial border or bedding subject is to plant only one of each variety in a given location. To produce the effective coloring of mass planting no less than three of a variety should be planted together.

Phlox may be propagated by seed, cuttings, or division, the latter method being the one most commonly used. The roots or clumps increase in size rapidly, and therefore the plants should be lifted, divided, and reset every three or four years. As the crown becomes larger by spreading out, it follows that the younger part of the plant is that portion around the outside of the clump. This fact might well be borne in mind when dividing and resetting. The periodical dividing of phlox is most important and necessary, for if the plants become crowded, the flowers will be poor and small. The best time to do this operation is early in the spring, before the new growth starts, using a long, sharp knife with which to do the cutting. When setting the plants out, a distance of from twelve to fifteen inches should be allowed between plants. As soon as the plants have done blooming, the faded flower heads should be removed, for if they go to seed and seedlings spring up around the established plants, they will, if not pulled out when young,

(Continued on page 2, col. 3)

Second Season of 4-H Camp in Essex County Startling Success

One hundred and two 4-H members from Danvers, Lawrence, Newburyport, Beverly, Groveland, Bradford, Cliftondale, Saugus, Rowley, Newbury,



HORACE J. SHUTE, COUNTY CLUB LEADER, SUPERVISOR OF 4-H CAMP.

MRS. EVERETT NOYES, CAMP NURSE AND SISTER OF MR. SHUTE.

Georgetown, Gloucester, Andover, W. Boxford, W. Newbury, Essex, Methuen, North Andover, Ballardvale, and Haverhill, attended the second annual 4-H camp for Essex County members at the Happy Health Camp in Boxford, which closed on Saturday, July 2, with appropriate exercises under the leadership of Horace J. Shute, popular County Club leader. Assisted by eight counsellors and three junior counsellors, the campers carried on outdoor activities affording freedom and joy.

Working under a point system, the camp was divided into four tribes with Indian names: Tahattawan, signifying great vision; Chittenango, meaning high tide or full of wisdom; Amazon, showing great power, and Naumkeng, a sign of peace. The effort of each tribe was to secure the greatest number of points attainable through swimming, nature lore, arts and crafts, and neatness of dormitories. At the close of camp a shield

Attention Students and Alumni

The Essex County Chapter of the F. F. A., co-operating with the staff of the School, is planning a big Field Day for Wednesday, July 20, to be held at the School from 11:00 A. M. to 3:00 P. M.

A varied program which should interest everyone has been carefully planned. Amongst other items this consists of an athletic program, a speaking program to be addressed by farmers and others, a meeting of the F. F. A. and some of its sub-committees, and an examination of the work on the School Farm and conditions at date.

It has long been the desire of the management to have a full quota of the students back to see the farm in the midst of the growing season, and this will furnish an excellent opportunity. In addition to the return of the students, it is desired to extend a cordial invitation to parents and to employers to join us that day.

was awarded the Amazon tribe and separate awards were given to the highest individual scorers.

There is nothing artificial in 4-H campers. They are "stout fellows," both boys and girls, who apply the significance of the 4-H's to each task they undertake.

Wild flowers and leaves were among their mounted specimens at the end of camp. Insects were also identified, as were birds and animals. The camp location, on Baldpate Pond, surrounded by wooded areas, lent itself ideally to nature exploits.

Silhouette painting on glass, relief carving on wood, and tooling leather were among the crafts taught the campers by skilled counsellors.

Song contests among the tribes gave added spirit to a camp atmosphere never lacking in sprightliness, and in the dusk of late evening, camp fires characteristically brought to a close the colorful day of camp living.

Among the campers who were honorary members, having attained distinction in 4-H fields during the past year, were Nancy Ordway of Groveland, winner of the Essex County music contest; Doris Albrecht of North Andover, winner of a 4-H news-writing contest; Eleanor Buckley, West Newbury, and Walter Eldridge, of Georgetown.

(Continued on page 2, col. 2)

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Hortace J. Shute

Calendar

- July 20—Field Day, sponsored by Future Farmers of America Association for all students, at the School.
July 24 to August 6—State 4-H Camp at Amherst.
July 25-29—Summer Conference of Vocational Agricultural Instructors in Massachusetts, to be held at Amherst.
July 26-29—Farm and Home Week at the Massachusetts State College, Amherst.

Summer Projects

The following students, as reported by Instructors, are carrying on projects characteristic of the work taken up by students of this School:

Henry Richardson, member of the Sophomore class, is employed at the Lane Dairy Farm in Ipswich, in addition to managing a poultry project with the help of a cousin, at his home in Lawrence.

George Smith of Hamilton, member of the Senior class, in addition to working for Mr. L. G. Foan at his poultry plant in North Beverly, has an ownership project of 600 chicks at home. At the present time George has marketed all the broilers from his first crop of chicks and anticipates a good market for the second crop. This, along with gardening and ornamental work at home, keeps George well occupied.

Mortimer Brown, a Junior, of Marblehead, is marketing practically all of his poultry as a dressed product. He also has, among his laying hens, one pen of brown Leghorns, a rather unusual breed for this section. In addition to this, there are about fifty young Mallard ducks which will be available for decoys later on.

Students Broughton and Theiling are working on alternate weeks at the

Alumni Notes

John Kachadorian, class of 1932, whose fruit crop was spoiled by the late June frost, is working in his father's orchard, and he anticipates, with appropriate remedies, a bumper crop of his own in 1933.

Bradford Webb, a graduate of the class of 1931, completed in June his course at the Stockbridge School in Amherst. He is now in the employ of Melville Gray of Wenham.

Walter Lewis of Andover, and Milton Snow of Lawrence, both graduates of the 1932 class, have been accepted for admittance to the Massachusetts State College, where they will continue their agricultural training. Walter has picked three thousand quarts of strawberries this year during his summer project, in addition to rigging up a case for dressed poultry for the F. F. A. roadside stand on the School property.

Donald Bentley, class of 1932, and Maynard Brown, class of 1924, are employed at the Mason Dairy and Rabbit Farm in Beverly Farms, Massachusetts.

Irving Day, class of 1932, is doing general poultry work on the Russell Poultry Farm in Reading.

Harry Lear, class of 1927, has recently enlarged his selling outlet on the Andover turnpike in Danvers. In addition to dairy products, he is disposing of many eggs each week, besides vegetables and flowers. Within the last month he has completed the building of a new home on the farm of his family.

Thomas Gould, class of 1927, writes that he is going in for politics in West Burke, Vermont, where he was recently elected Town Moderator.

School plant in addition to having home projects. The School has a large number of cross-bred birds, including a Rock Red cross and Leghorn Red cross. The boys find it interesting to see a group of black pullets with yellow necks and white pullets with red spots among the Rhode Island Reds. Students coming in this Fall will be interested in following these birds through the winter.

Arthur Peatman, Junior, who has been in the employ of Nick Zack, poultryman of West Andover, recently broke his arm. While he is incapacitated, his younger brother, John, a Freshman, is carrying on in his stead.

(Continued from page 1, col. 3)

At the close of camp on Saturday night, July 2, the spirit of 4-H work was solemnized through the pure simplicity of candlelight in a service conducted by Harley A. Leland, Assistant State Club Leader.

News of the School at a Glance

June 22

Parents' Day, observed annually in the homemaking department of the School, was well attended and most successful this year.

One hundred and fifty parents and friends of the Homemaking students witnessed a review of the work completed during the past year. Departmental exhibits afforded a fair display of work carried on in each of the homemaking classes.

Miss D. D. Williams, Home Demonstration Leader of the State of New Hampshire, speaker of the afternoon, suggested that the meanings involved in homemaking be incorporated through a symbol similar to the 4-H clubs' four-leaf clover denoting: Head for clearer thinking; Heart, for greater loyalty; Hand, for larger service; and Health, for better living.

June 24

The Homemaking School closed its doors for the summer.

(Continued from page 1, col. 1)

gradually crowd the older plants. These seedlings are invariably of a magenta shade or some color not desirable for the border as originally planned.

The worst enemies of phlox are mildew and the red spider, both of which can be controlled by frequent dusting of the foliage with superfine sulphur. In recent years the phlox leaf spot (*Septoria divaricata*) has been quite prevalent in this locality, and in many cases has done considerable damage. This is a fungous disease which attacks the leaves, causing brown spots to appear on them. The affected foliage soon turns yellow and dies. Dusting with sulphur will also control this disease, or spraying with ammoniacal copper carbonate will prove effective. As the fungous lives on the dead foliage during the winter, all fallen leaves should be raked up and burned in the fall.

A proper selection of varieties will enable one to have a continuous bloom of phlox from late June to September. Some of the recommended varieties are, by colors: White—Miss Lingard, F. G. Von Lassburg, Mrs. Jenkins, and Stella's Choice; pink shades—Elizabeth Campbell, Jules Sandean, Mrs. Milly Van Hoboken, Gruppenkonigen, and Thor; red shades—Debs, Africa, and Beacon; lavender, lilac, or bluish—Le Mahdi, Antonine Mercier, and Maid Marian; white with pink or red eye—Europa, Count Zeppelin, and Bridesmaid.

Poultrymen Reduce Costs to Meet New Conditions

A program for meeting the lowering scale of egg prices has had wide adoption in Worcester County during a series of meetings, twenty-seven of which have already been held. The plan is as follows:

A.—To Increase Profits in Laying Flocks by—

1. Systematizing for lower labor costs.

2. Better culling, including elimination of fewer pullets in fall, more in winter, as sick birds and non-layers appear, and less in spring and summer, when a bird that pays more than her feed cost is more profitable than no bird.

3. Holding over the best females—
a. As fall layers, with lights and a milk mash, or
b. As second year layers, or
c. As breeders.

B. To Grow a Better and More Profitable Chick Flock by—

1. Securing one-third to one-half the chicks in January.

2. Using chicks from pullorum disease free, vigorous stock.

3. Avoiding crowding, allowing at least one-half square foot of brooder floor space per chick, and putting not over 300, and better 250 chicks, under a 50 to 56-inch hover.

4. Maintaining a warm stove (90 degrees the first week, reducing five degrees each week), and cool house.

5. Avoiding coccidiosis by keeping the brooder house dry, but recognizing infection early and controlling with clean quarters and a 40% milk mash.

6. Supplying clean, well-sodded range at the rate of 250 pullets per acre and moving feed, water and houses to prevent bare, polluted areas.

7. Vaccinating not less than one month from housing time if there was chicken-pox on the farm last year.

National Record Cows

Two cows in the herd of Edward Wigglesworth of Topsfield, and one in the herd of the Stevens brothers of North Andover, have recently finished their official record for production, which entitles them to entry in the Advanced Register of the American Guernsey Cattle Club.

A booklet entitled, "Vacation in the Country—Where To Go," including farms and resorts in Massachusetts, may be obtained for the asking through the Massachusetts Department of Agriculture, State House, Boston.

Farm Real Estate Index Lower

The Bureau of Agricultural Economics' index of the value of farm real estate was 89 for March 1, 1932, as compared with 106 for March 1, 1931, as compared with a pre-war base of 100. Declines in farm real estate values have been drastic and general, the bureau finds. Among the groups of States, only the New England and Pacific States had higher than pre-war values on March 1, 1932. On that date the average for the East North Central group was 73 per cent of pre-war; the West North Central States, 81 per cent; the Mountain States, 82; the Middle Atlantic and South Atlantic States, 96; and the East South Central and the West South Central, 97. In 1920 the index for the United States reached 170, in comparison with the pre-war base of 100. Five years later it was 127.

—From "The Official Record,"

A Right and A Wrong Way

A word to the wise concerning the seeding of alfalfa in late July: the seed bed will be the root of either evil or good. It must be firm beneath, while the surface two inches require absolute freedom from weeds, and should be fine.

Evil will result from plowing or even disking deeply and planting immediately. Deep working of the soil brings only fresh weed seed to the surface to germinate and grow in place of alfalfa.

There is wisdom in working lime into the soil several months in advance of seeding, in addition to manure and superphosphate (1000 lbs.). R. W. Donaldson, Extension Agronomist, advocates a surface scratching of the soil in July, with the object of killing several successive crops of weeds and to allow the seed bed to settle. Disking lightly rather than plowing out stubble is advised for alfalfa to obtain this condition. The lime, of course, should have been well worked in previous to seeding the oats.

Twenty pounds of hardy northern-grown seed per acre are needed, with special attention given to inoculating the seed carefully.

On light soils, especially where little manure has been used, 200 to 400 pounds per acre of potash is strongly recommended to be used, in addition to the superphosphate which is always needed.

Poison in Potato Flea Beetle Control

Based on experiments conducted at the Ohio State College, the following results have been verified.

The Dairyman's Bookshelf

In continuing the bookshelf, in the interest of agriculturists, we are printing this month a list of books and bulletins on animal husbandry and dairying subjects:

Common Diseases of Farm Animals, by Craig. J. B. Lippincott, publishers.

Diseases of the Horse, Bureau of Animal Husbandry, United States Dept. of Agriculture, Washington, D. C.

Productive Horse Husbandry, by Gay. Orange-Judd.

Judging Farm Animals, by Plum. Orange-Judd.

Types and Breeds of Farm Animals, by Plum. Orange-Judd.

Breeding and Improvement of Farm Animals, by Rice. McGraw-Hill.

Feeds and Feeding, by Henry and Morrison. Henry-Morrison Publishing Company.

Beef Cattle, by Snapp. Orange-Judd.

Dairy Cattle, Feedings, and Management, by Yapp and Nevens. John Wiley and Sons.

Dairy Enterprises, by McDowell and Field. John Wiley and Sons.

Care and Handling of Milk, by Ross. Orange-Judd.

Modern Methods of Testing Milk and Milk Products, by Van Slyke. Orange-Judd.

Milk and Milk Products, by Eckles, Coombs, Macy. McGraw-Hill.

Dairy Farming, by Fraser. Wiley and Sons.

Co-operation in Marketing Dairy Products, by Bartlett. C. Thomas, publisher.

Standard Methods of Milk Analysis. American Public Health Association.

The Manufacture of Ice Cream. Extension Bulletin No. 27, University of New Hampshire.

Dairy Control Circular. Massachusetts Experiment Station, Amherst.

Calcium arsenate is a more efficient and economical poison than lead arsenate in controlling flea beetles. Either four pounds should be used per 100 gallons with Bordeaux spray, or one pound for each ten pounds of 20-80 copper lime dust.

Spraying or dusting during the periods of most rapid growth of vines gives the best control. In some cases greatest growth occurs when the plants are young; in other cases growth is greatest in later season periods.

In view of the fact that it is still difficult to foretell when the rate of growth of vines will be greatest, it is recommended that poison be included in all the sprays and dusts and that spray be applied most frequently when the plants are growing fastest.

Sour Milk

Prepared by MAY E. FOLEY,
Extension Nutritionist.

The souring of milk or cream in warm weather need not seem like a tragedy to the housewife who knows how to use it. People who live in countries with very little refrigeration have always used sour milk and often prefer it to sweet milk, even to drink. Sour milk is just as nutritious as sweet, and it is just as extravagant to waste it, since it costs as much in the beginning.

There are many excellent recipes for using sour milk, but the housewife may easily use her sweet milk recipes. One teaspoon of soda is equal in leavening powder to 4 teaspoons of baking powder, or for each teaspoon of baking powder omitted, substitute $\frac{1}{4}$ teaspoon of soda. Many cooks like to use some baking powder, even when soda is used. For example:

SWEET MILK RECIPE

- 2 cups flour
- 1 cup milk
- 2 tablespoons fat
- 4 teaspoons baking powder

SOUR MILK RECIPE

- 2 cups flour
- 1 cup sour milk.
- 2 tablespoons fat
- 2 teaspoons baking powder
- $\frac{1}{2}$ teaspoon soda

Soda should always be sifted with the flour and not added to the liquid. Little dark bitter spots in the product show that the soda is not evenly distributed. This never happens when the soda is sifted with the flour.

SOUR MILK ICE CREAM

- 1 egg
 - $\frac{1}{2}$ cup orange juice
 - 4 tablespoons lemon juice
 - $1\frac{1}{2}$ cups sugar
 - 1 quart sour milk, or buttermilk
- Beat egg until light. Add to fruit juices, milk, sugar. Freeze.

SOUR MILK GRAPE SHERBERT

- 2 cups grape juice
- 2 tablespoons lemon juice
- 4 cups buttermilk or sour milk
- $\frac{1}{2}$ cups sugar

Mix sugar and fruit juices. Stir constantly while slowly adding milk. Freeze.

COTTAGE CHEESE

For making cottage cheese, the milk should be thoroughly clabbered, or coagulated. Set the pan of clabbered milk in a pan of hot water and heat it slowly until the curd separates from the whey, being careful not to let it get too hot, which makes the curd tough. The best temperature is between 92 and 94 degrees Fahrenheit. When the curd is entirely separated,

turn it into a strainer lined with a piece of cheesecloth wrung out of hot water. Let it drain and save the whey to use in cooking. Turn the curd into a bowl, crush it with a fork, and add salt and other seasoning as desired.

BAKED FISH WITH SOUR CREAM

- 1 white fish or large fillet
- $\frac{1}{4}$ to 1 teaspoon salt
- $1\frac{1}{4}$ cups sour cream
- 2 tablespoons bread crumbs

Filletts are usually salted and need little extra. If fresh fish is used, rub well with 1 teaspoon of salt after cleaning. Lay fish on a well-greased baking dish. Place in a very hot oven (550 degrees F.) for 5 minutes. Reduce heat to 400 degrees F. Cover fish with cream, sprinkle with crumbs and bake until the cream becomes a rich yellow color and the crumbs brown. Surround serving platter with sliced tomatoes.

Garden, Canning, Nutrition Letters Out

The July garden, nutrition, and canning letters are being sent out to Essex County homemakers. We feel sure that these will be read with much interest. They include, among other things, the methods of canning blueberries and peaches with the right type of syrup to be used.

Quoting from the letter: "You want to have a good big supply of canned tomatoes. You know how good they are and 'how good they are for you' and your family. If you like to serve tomato juice or tomato cocktail, the best method is to can tomatoes and drain off the juice for drinking and use the pulp for just tomato. That is really killing two birds with one stone. There are tomato products you can make easily: chili sauce, catsup, etc."

If there are any homemakers desirous of receiving this letter service, they may write to Miss Marion P. Crawford, Home Demonstration Agent, at Hathorne.

Events of Near Future to Interest Homemakers

Homemakers will be glad to know that there are two interesting features which will soon take place at Amherst.

One will be an opportunity to take part in canning lessons under Professor Cole on July 29 during Farm and Home Week.

On August 2 and 3 an opportunity will be afforded those women desiring to know more about presenting amateur plays for church, Grange, or community organizations, when these subjects will be discussed thoroughly at Amherst.

Homemakers' Program for Farm and Home Week

Dates for Farm and Home Week at the Massachusetts State College are Tuesday, July 26 through Friday, July 29.

The following speakers are scheduled for the homemaking department program: Alice F. Pratt, of the Singer Sewing Machine Company, Boston, on *Using Your Sewing Machine and Attachments*; Mrs. H. J. Haynes and Miss Grace B. Gerard of Massachusetts State College, on *Home Furnishing Problems*; H. N. Glick of Massachusetts State College, on *What a Psychologist Thinks a Mother Should Know*; Mrs. Annette T. Herr, Home Demonstration Leader, of Amherst; Alice H. Hale, of Boston University and the Garland School, on *Clothes, Money, and Satisfaction*; C. L. Thayer, M. S. C., on *Bulbs for the Home*; Lucille Brewer, General Foods Corp., on *Attractive Suppers at Low Cost*; Mrs. Ruth D. Morley, M. S. C., on *Keeping Up With the Times*; Alex Cumming of Bristol, Conn., on *Some of the Newer Perennials*; Alice Haley, on *The Consumer's Problems*; G. H. Johnson, of the Laundryowners' National Association, on *The Laundering Qualities of Fabrics*; Mrs. Della T. Lutes, Syracuse Washing Machine Company, on *Home Laundering Problems*; Mrs. Esther Cooley Page, M. S. C., on *Reclaiming Your Wardrobe*; Sybil Foster, Massachusetts Society for Mental Hygiene, on *What a Mental Hygienist Thinks Mother Should Know*, and *Beginnings of Children's Behavior Problems*; and Mrs. Grace Morrison Poole, President of the General Federation of Women's Clubs, on *Our Treasure Chest*.

Reservations for any homemakers desiring to attend all or part of the Farm and Home Week activities will be made on application through the college.

Miss Mary Pozzi, of the State College, will have charge of recreation.

Home Demonstration Agent and Recreation Specialist Visit Health Camp

Miss Marion P. Crawford, Home Demonstration Agent, and Miss Mary Pozzi, Specialist in Recreation, of Amherst, recently spent an interesting afternoon with the councillors and children of the health camp conducted under the auspices of the Essex County Health Association held at the Essex County Sanitarium in Middleton.

Miss Pozzi spent some time with the councillors and then played games with the children, stressing those games which will develop muscle, interest, and concentration. The children entered heartily into all the games and showed great pleasure through their happy faces.

ESSEX FARMER AND HOMEMAKER

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Where Farmers Nearly All Co-operate

J. H. FRANDSEN

Massachusetts State College

Nearly all Danish farmers are co-operative minded and do things the cooperative way. The Danish farmer contacts with foreign countries thru a net work of cooperative agencies. He buys his necessities at his cooperative store. His money, his loans, and his savings are handled by the cooperative bank. The seed, the feed, and the fertilizers he buys come from a cooperative buying and importing association. The electricity that he uses comes from a cooperative power plant. He delivers his milk to a cooperative dairy, and his butter is sold through cooperative agencies. His pigs and his eggs go to a cooperative export association. The remarkable high production of his cows is largely the results of the good work of co-operative breeding and cow test associations.

In this country conditions of course are different and many farmers are quite justified in not wishing to tie up with cooperative concerns.

Denmark is distinctly an agricultural country and perhaps therein lies the reason for its leadership in agricultural cooperation. Seventy-five per cent of its total area is used for agricultural purposes; nine per cent is in carefully managed timber area. Most of the remaining fifteen per cent is as yet unfit for agricultural purposes although new areas are constantly being reclaimed. There are 206,000 farms having cultivated areas of not less than half a hectare each. (A hectare is approximately equivalent to two and a half acres.) Sixty-five of the farms contain less than fifteen hectares and ninety-five per cent have less than one hundred and forty-eight acres. From this one can easily deduct that Denmark is a country of small farms and the preponderance of these farms are owned by farmers. Less than eight per cent are farmed by tenants.

There are about fourteen hundred cooperative creameries in Denmark. Ninety-five per cent of Denmark's farmers belong to cooperative creameries. Cooperatives handle ninety per cent of the total milk or 10,710,000 pounds, and ninety-three per cent of the butter.

(Continued on page 4, col. 3)

Norman Morgan

For the last six years Norman Morgan, a graduate in the class of 1925, has been managing the Braeland Poultry Farm in Andover. In February of this year he leased the farm property and with the assistance of Mrs. Morgan has been running the farm for himself.



NORMAN MORGAN,
GRADUATE POULTRYMAN,
WITH HIS "RIGHT-HAND MAN."

Specializing in Rhode Island Reds he had, in February, three thousand layers, and in the spring seven thousand young chicks.

Spread over the large area of his farm are twelve brooder houses, a three-decker barn with a capacity for fifteen hundred laying hens, two houses with a capacity for two thousand birds each, twelve open-air shelters, and a brooding equipment for forty-five hundred chicks with one fire to brood them all. For the third season he is using a 9200-egg electric incubator.

In addition to his poultry equipment, Mr. Morgan has a newly erected wayside stand which he supplies with dressed poultry, eggs, and garden products.

Nor is it to be forgotten that his "right-hand man" is Mrs. Morgan, who keeps all the accounts, manages the large farm house, and is a thoroughly encouraging companion.

Home Demonstration Agent Retires

Miss Marion P. Crawford, who has been Home Demonstration Agent for Essex County the past nine years, will officially retire from active service in this line on August 31. She plans to spend summers with her sister, Miss Clara Crawford, in North Brookfield, Mass., and will winter in Walpole.

It is with regret that the Extension Department and this School, with which she has been in close contact, see her leave. It is their wish, however, that she will find pleasure and happiness in her new leisure.

Testing New Fruits

In the fruit testing ground at the School there are now several hundred varieties of new fruits under test. One of the outstanding features this year has been the splendid behavior of the English raspberry Lloyd George. While many of the American varieties winter killed badly, this variety came through nearly one hundred per cent hardy. It fruits heavily producing many fruits considerably over an inch in length. The quality is excellent but the color is a trifle dark. The variety is probably more adapted to home trial than for commercial purposes.

NEW PLUMS

The first plum to ripen on July 22nd was Plumcot. This variety proved to be an abundant yielder of yellow plums with a red cheek. The quality is pronounced by many as good for a variety so early. Two other varieties which should be tested by plum lovers are Santa Rosa and Beauty. Santa Rosa yielded an abundant crop of purplish red plums with a heavy dark red flesh and should prove to be excellent for both table use and canning.

CULTIVATED BLUEBERRIES

Nine out of ten named varieties fruited this year. In spite of dry weather the yield was good and the size excellent. The School would be very glad to give information and suggestions concerning the growing of cultivated blueberries. There is a considerable difference in time of ripening between the earliest and the latest sorts. There is also a great variation in the flavor and color and shape of the different varieties. Possibly in a dry season like the present

(Continued on page 4, col. 3)

Essex Farmer and Homemaker

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Calendar

- September 6—Opening date for new students in agricultural department.
- September 6—Opening date for new students in homemaking department.
- September 7—Opening date for old students in homemaking department.
- September 7-10—Topsfield Fair.
- September 13-17—Brockton Fair.
- September 18-24—Eastern States Exposition.
- October 3—Opening date for old students in agricultural department.

Summer Projects

The following students, as reported by Instructors, are carrying on projects typical of the work taken up by members of this School:

Student Dorrall Berry, a member of the Senior class, has named his farm in North Andover "Hidden Springs Farm." From a credited herd of his own he supplies a daily milk route in Middleton.

Student Everett Silva, a Senior, is supplying his own sales room in Rockport with the ornamental and floral displays raised in his garden, greenhouse, and hot beds.

Entries of Fruit and Vegetables for Department K at Fair

There is an excellent opportunity awaiting children and youths under 21 to exhibit fruits and vegetables at the Topsfield Fair, which is to be held from September 7 to 10 inclusive. Entries are made to Department K, supervised by Instructor Eastwood of this School. Those wishing to exhibit should write to R. H. Gaskill, Topsfield, Mass., for a complete premium list. See if you can get a prize!

Alumni Notes

Mildred L. Russell, class of 1923, writes that she spent a few days in July visiting Eunice Freiwald, class of 1929, at her home in New Jersey.

Edward Dodge, class of 1926, is employed by Dr. Kingman of Bridge-water.

George Sargent, class of 1924, is working as herdsman on the Dwight Minor farm in Bristol, Connecticut. He also has five hundred laying hens of his own.

Edwin Bergstrom, class of 1919, club agent for boys and girls in Rutland, Vermont, attended the American Institute of Cooperation held at New Hampshire University the first week in August.

Wilfred Jordan, class of 1924, took an active part in arranging for the meeting of Essex County Dairymen held August 8 at the Argilla Farms in Ipswich. Jordan has been employed at the Argilla Farms since his graduation from the School.

Henry Ellis, class of 1927, graduated from the Bryant-Stratton School of Business Administration in Providence, August 19.

John Runnells of Lynn, a former student at this School, is now engaged in the florist business. Mr. Runnells suggests a county-wide organization of amateur florists with an occasional meeting at the School. The School will offer its facilities whenever such a group is formed.

Howard Bredbury, class of 1929, is now located at 26 Pearl St., Lawrence.

Jack Sturtevant, '27, plans to enter Massachusetts State College in September.

Nathaniel Hart, class of 1931, now employed as foreman on the School poultry plant enjoyed a week's vacation early in August.

Question: Some cod liver emulsions and tablets are advertised. Do you recommend these?

Answer: I would make the general statement that these emulsions and tablets be used only upon the advice of the doctor. Some of them contain drugs and we have no right to prescribe drugs, and some are so low in vitamins as to be almost valueless from this point of view.

Question: What is viosterol?

Answer: Viosterol is a concentrated vitamin D preparation and is sometimes prescribed by the doctor when the baby has rickets, and especially if he cannot digest much fat. It should be given only under the doctor's advice.

Question: Some parents complain that the baby sometimes spits it up and so smells "fishy" afterwards.

Answer: A good time to give it in this case is after the baby is undressed for his bath.

News of the School at a Glance

July 20

Over one hundred students, graduates, and friends of the School were present for a field day sponsored by the Essex Chapter of F. F. A. members, and the management of the School.

In addition to a very worthwhile speaking program including John S. Lawrence, economist, Melville Grey and George C. Thurlow, trustees of the School, a general program included sports and inspection of the School farm.

August 1-7

Approximately 1800 pullets and 1000 cockerels were vaccinated on the School plant.

One hundred doses of pigeon pox vaccine were used in addition to the fowl pox vaccine, in order to study its value and effectiveness under similar conditions.

Turnip Sauerkraut is New Farm Food

The farmer who used to put down a barrel of cabbage sauerkraut each fall may add another product to his list. Turnip sauerkraut is a new appetizing food suggested by the United States Department of Agriculture.

The department finds that a good sauerkraut can be made from medium-sized, purple-top turnips. They should be firm, sweet and juicy in order to allow proper fermentation and flavor. The fleshy part of the root is ground or shredded and mixed with salt at the rate of 4 ounces of salt to 10 pounds of turnips. The mixture is then packed in stone jars, weighted down, and allowed to ferment.

Turnip sauerkraut may be stored at a low temperature for some time, the department says. It has a sharp flavor, closely resembling good cabbage sauerkraut. Most of the turnip flavor is lost when the kraut ferments.

Family Finance Meetings

WOMEN'S EXTENSION SERVICE

It was announced at the June Conference that Miss Grace Gerard, Home Furnishing Specialist, would have time available for single meetings on Family Finance. These will be community or district meetings. The personnel should be Extension-minded and not just an organization that wants a free speaker.

It would be well for those interested to write in to the Essex County Extension Department at this School.

Essex Coming Forward

Professor Ford Prince, Field Crops Specialist for New Hampshire, states: "The greatest need of dairymen in the northeastern states is a cheap source of home grown protein. It seems quite natural for them to undertake the culture of alfalfa, a long-lived, high producing hay crop, as rich in protein as many commercial dairy breeds."

"From the standpoint of economy neither nitrogen nor phosphorus has paid as good returns as potash in this experiment. . . ."

"Grass appeared in the stand from the application of nitrogen as a top-dressing."

"The increases from treating with potash alone are just as high as from the application of twenty extra loads of manure per acre applied in the beginning of the experiment."

"The use of higher quantities of lime than two tons per acre has been distinctly disappointing."

"Two extra tons of lime per acre had a depressing effect."

"This depressing effect is probably due not to the lime itself . . . but to the indirect effect of rendering the potash in the soil less available."

Recent reports from the Eastern States Farmers Exchange show that in 1931 Essex County used 2995 pounds of alfalfa seed as compared with 3045 pounds for Worcester County. Essex was second in the state—with an increase of twelve per cent over 1930. Berkshire came third with 1930 pounds.

T. A. Thomas of Salisbury has an excellent demonstration seeded three years ago. Potash certainly showed benefits. The basic slag showed results but mostly by producing more grass.

Caleb Cogswell, Western Avenue, Essex, has a good fertilizer test: after the first cutting in 1932 he applied sulphate of ammonia, manure, superphosphate, and potash alone and in combination. Watch it for results.

—F. C. Smith,
County Agricultural Agent.

Time to Start Lawns

From now to the last of September is the very best time to thicken up an old lawn or make a new one. Cool, autumn days favor the germination of grass seed and the development of grass roots. At the same time very few weed seeds are starting growth. Such a lawn will grow late this fall and will be already for an early start next spring.

Don't delay lawn-making. It pays. Detailed information in lawn improvement can be had on request to this School.

—H. Linwood White.

Lime as Neutralizing Agent for Fertilizers

Dr. Pierre of West Virginia claims that various fertilizers produce a certain amount of acidity in the soil which must be neutralized by the use of lime. His experiments indicate results as follows:

Material	Pounds of Lime Carbonate per Pound of Nitrogen
Ammonium Sulphate	6
Ammonios A	5.2
Leuna Saltpeter	4.6
Urea	3.0
Ammoniated Superphosphate	3.0
Ammonium Nitrate	2.9

FAIRS DATES

Topfield

September 7-10

Brockton

September 13-17

Eastern States Exposition

September 18-24

Facts

Three of nine known proven sires in Massachusetts are owned by Essex County men. All Guernseys, these sires are Dolly's Foremost of High Rock 67827, Argilla Farms, Ipswich; Mixer Randot, 93250, Randot Farm, Methuen; Florham Premier 109643, Meredith Farm, Topsfield.

According to W. C. Harrington, Extension Specialist at the Massachusetts State College, one way of outwitting the European corn borer is to cut the corn close to the ground. If the corn is ensiled after being cut low, the borer will be destroyed, being killed either by the knives of the ensilage cutter or suffocated in the closely packed corn in the silo.

Bookshelf for Landscape Gardeners

Continuing the bookshelf column for agriculturalists, the *Farmer and Homemaker* prints this month a list of books and bulletins for the landscape gardener, recommended by Instructor C. S. Wright of this School.

Complete Home Landscape, by Jennings, A. T. De LaMare, Publishers. *Foundation Planting*, by Leonard Johnson, A. T. De LaMare.

Little Book of Shrubs, by Hottes, A. T. De LaMare.

Little Book of Perennials, by Hottes, A. T. De LaMare.

American Rock Gardens, by Hamblin. Orange-Judd Publishing Company.

The Lawn, by Dickenson. Orange-Judd Publishing Company.

Bulletins:

Perennials. Office of Publications, U. S. Department of Agriculture, Washington, D. C.

Facts on Lawn Management. Massachusetts Extension Service, Massachusetts State College, Amherst, Mass.

Rural Planting the Village. Farmers Bulletin No. 1441. Office of Publication, U. S. Department of Agriculture, Washington, D. C.

Fruit Growers Have Field Day

At a fruit growers' field day, held at the Brooksby farm in Peabody August 10, Professor W. H. Thies discussed the control of the apple maggot and leaf hopper which are unusually plentiful this year. He particularly emphasized that the apple maggot can fly at least one hundred and fifty yards. Orchardists should clean out a space five hundred feet wide around the orchard.

George Drew, formerly superintendent of the Massachusetts State College orchards, emphasized the essential facts of thoroughness and timeliness in spraying. He has applied seven sprays this year.

Archer Pierce, superintendent of the Brooksby farm, gave a demonstration of spray articles.

tions, outlined the winter plans of the legislature for stabilizing the prices of milk and cream.

Winners of a cattle judging contest, which brought the meeting to a close, were: G. Nelson of Methuen, Ralph Woodworth of W. Newbury, and G. H. Paynter of Essex.

Editor of "Hoard's Dairyman" Speaker at Dairymen's Outing

At an annual dairymen's field day, held this year on August 8, A. C. Glover, editor of "Hoard's Dairyman," told an audience of two hundred and fifty that farmers should concentrate on producing perfect crops and breeding better cattle in order that the products on the markets should become more stable.

Harvey Turner, president of the county and state dairymen's associa-

TOPSFIELD FAIR
SEPTEMBER 7-10

4-H Club Members Will Enter Exhibits at Brockton Fair

Four-H club members will have the opportunity of entering competitive exhibits in boys' and girls' handicraft and canning at the Brockton Fair this fall (September 13-17). It is the first year that anything of this kind has been offered and it is hoped that there will be a large number competing for the cash prizes which will be offered.

The canning classes are listed below. Handicraft premium lists will be sent to any requesting them from the County Club Agent.

Class A—Collections

- Lot 1. For 1st Year Members.
5 jars; 2 fruit, 3 vegetables, one of which is greens or tomatoes. \$3.00 first, \$2.00 second, \$1.00 each for next five.
- Lot 2. For 2nd Year Members (1st year may enter).
7 jars; 2 fruit, 2 vegetables, one of which is greens or tomatoes, one soup, one jelly, one jam. \$4.00 first, \$3.00 second, \$2.00 third, \$1.00 each for next five.
- Lot 3. For 3rd Year and Older Members (1st year or 2nd year may enter).
10 jars; 3 fruit, 3 vegetables, one of which is greens or tomatoes, one pickle, one jelly, one jam, one marmalade. \$5.00 first; \$4.00 second, \$3.00 third, \$2.00 fourth, \$1.00 each for next five.

Class B—Single Products

- 3 jars in each lot
- Division I—For First Year Members.
Lot 1—Canned String Beans (cut).
Lot 2—Canned Carrots.
Lot 3—Canned Tomatoes.
Lot 4—Canned Peaches.
Lot 5—Canned Blueberries.
Six prizes in each lot, viz.: \$1.00 first, 75c second, 50c third, 25c each next three.
- Division II—For Second Year Members (1st year may enter).
Lot 1—Canned String Beans (cut).
Lot 2—Canned Carrots.
Lot 3—Canned Beets.
Lot 4—Canned Tomatoes.
Lot 5—Canned Peaches.
Lot 6—Canned Blueberries.
Lot 7—Apple Jelly.
Lot 8—Strawberry Jam.
Six prizes in each lot, viz.: \$1.00 first, 75c second, 50c third, 25c each next three.
- Division III—For 3rd Year and Older Members (1st and 2nd years may enter).
Lot 1—Canned String Beans (cut).
Lot 2—Canned Carrots.
Lot 3—Canned Beets.
Lot 4—Canned Corn.
Lot 5—Canned Tomatoes.
Lot 6—Canned Peaches.
Lot 7—Canned Blueberries.

- Lot 8—Canned Vegetable Combination.
Lot 9—Apple Jelly.
Lot 10—Strawberry Jam.
Six prizes in each lot, viz.: \$1.00 first, 75c second, 50c third, 25c each next three.

"My Twelve Loveliest Things—People Not Counted"

On returning from a conference in Washington where she represented the Massachusetts Extension Department in June, Miss Grace Frysinger brought back with her, four replies made by children and adults to the thought "My Twelve Loveliest Things—People Not Counted." Loveliest things, after all, seem to be brushing our noses—so close are they.

These are what an eight-year-old boy loved best: 1. Cold of ice cream. 2. The crunch of dry leaves as you walk through them. 3. The feel of clean clothes. 4. Water running in a bath. 5. Cool wind on a hot day. 6. Climbing up hill and looking down. 7. Honey in your mouth. 8. Smell of a drug store. 9. Hot water bottle in bed. 10. Babies smiling. 11. The feeling inside when you sing. 12. Baby kittens.

Older sister's loveliest things were: 1. Our dog's eyes. 2. Street lights in the river. 3. Colored stones when they're wet. 4. The smell of rain. 5. An organ playing softly. 6. Red roofs in trees. 7. Smoke rising. 8. Rain on your cheeks. 9. The smell of cut grass. 10. Red velvet. 11. The smell of picnics. 12. The moon in clouds.

An older cousin boy's loveliest things were quite different: 1. The feel of running. 2. Looking into clear deep water. 3. The taste of wild strawberries. 4. A swallow flying. 5. A clean hit in baseball. 6. Water being cut at the bow of a boat. 7. A mounted policeman's horse. 8. A builder's crane lifting something very heavy. 9. An express train hurrying. 10. The smell of wood. 11. The feel of a dive. 12. A thrush singing.

And these were the twelve loveliest things selected by a man: 1. The light that comes into a young person's eyes when he understands a new truth. 2. The thought of the everlasting arms. 3. A man standing for justice. 4. Securing an order by worth alone, in face of competition. 5. The stars over a church tower. 6. The birds' instinct for migration. 7. The fight of mankind to overcome disease. 8. Driving in traffic with good brakes and lots of power. 9. A conversation about life with a friend who perfectly understands. 10. A perfect phrase as "inexorable ideals." 11. The "Winged Victory" of Samothrace. 12. Being forgiven.

Question and Answer Column

Prepared by MAY E. FOLEY,
Extension Nutritionist.

Question: Is there any food value in bran or is it just roughage?

Answer: Bran is mostly roughage, although some vitamins, minerals, and starch do cling to the bran and are used in the body.

Question: Are the quick rolled oats as good as the long cooking varieties?

Answer: They are practically, if not quite as good, though some persons think the long cooking varieties have a little more flavor. When one considers the amount of fuel saved in the quick cooking varieties, one is justified in using them.

Question: Is there any difference in food value between ground or rolled oats?

Answer: There is none.

Question: Do coarse cereals and dark bread cause intestinal fermentation?

Answer: Normal people can use coarse cereals and dark breads without any difficulty and with great advantage because of their higher vitamin and mineral content. Some persons with irritated digestive tracts must use these foods in refined form.

Question: Should cooked cereal be used in summer?

Answer: There is no reason why cooked cereals should not be used in summer if they are liked. They are less expensive than the prepared varieties.

Question: Is cornmeal as good a cereal as the others?

Answer: Most of the cornmeal which we buy nowadays is refined cornmeal and so is not as good as the other coarse cereals. However, if it is ground to order in an old-fashioned mill from the whole grain, it compares favorably with other coarse cereals.

TESTING NEW FRUITS

(Continued from page 1, col. 3)

one the cultivated blueberry is the answer for keeping up the abundant supply of this most attractive and valuable fruit.

(Continued from page 1, col. 1)

The average membership per creamery is one hundred and fifty. All milk producers are eligible for membership. Each society owns and operates a creamery, conducts scoring contests, and has exhibitions for educational purposes. A trained manager is elected by a board of directors.

Because Denmark recognized her crisis sixty years ago she laid the foundation for her present prosperity through cooperation between state and farmers.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 13

HATHORNE, MASS., SEPTEMBER, 1932.

NO. 9

The Gladiolus Thrips

The Gladiolus season of bloom is ended and growers are digging their corms. Whether we have escaped the ravages of the Gladiolus Thrips (*Taeniothrips gladioli* M and S) or not, it will be well to start or renew the campaign against them at once, if we would keep the pests in subjection another season.

Many active black adults with yellow wing bases may be observed now, or soon, on the bases of the stalks close to the ground, and even in the ground and on the corms. When corms are dug it is customary to lay them in the sun to dry. This practice affords an opportunity for the thrips to infest the corms and thus obtain transportation to favorable winter quarters. It has not been certainly determined whether thrips overwinter in the field in this climate. Certain observations have led to the conclusion that infested corms are the sole cause of spring infestation. If this is so, then our attention can be focused on the corms alone, both before and after storage, with assurance of planting clean stock. The only field source of infestation then would be the gladiolus of a neighbor who did not likewise clean house, inasmuch as the gladiolus thrips does not appear to breed on other plants. It would be well, however, to give the plot or field a thorough cleaning and burn the gladiolus tops and other litter.

Thrips Feed on Gladiolus Corms

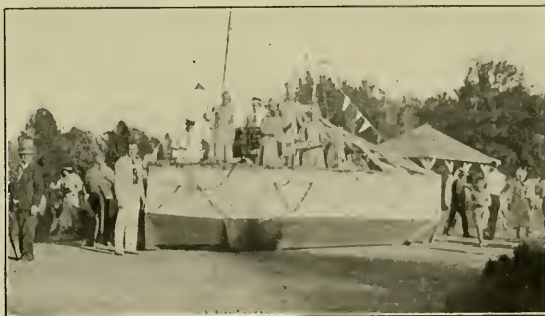
in storage, producing brown or rusted and roughened areas. They gain entrance through cracks in the scales and between the scales at the point where the top was cut off. They may attack the area around the base of the new corm and next the old corm, where the new roots develop, and prevent or reduce root growth. Thrips attack new roots as they form. Therefore, the sooner after digging the corms can be gone over and treated, the better. First, remove the

(Continued on page 4, col. 2)

200 Members in 4-H Parade

Of marked interest at the Topsfield Fair was the 4-H parade which marched Saturday afternoon, featuring the aims and achievements of club work in Essex County. Under

The 4-H Fleet



WINNING FLOAT OF METHUEN 4-H MEMBERS

the leadership of Horace J. Shute, fourteen hundred boys and girls in Essex County have organized canning, clothing, forestry, handicraft, and other clubs of home value. All these were represented in the parade by two hundred 4-H members.

Prizes were awarded to Methuen, North Andover, Beverly and Andover, for winning floats. Methuen was first with a 4-H fleet depicting the characteristics of 4-H work: leadership, sportsmanship, friendship, ownership, partnership, and citizenship.

Second came North Andover, with a float entitled "Follow the Gleam," typifying 4-H spirit.

Beverly was third with a demonstration of the practices carried out by 4-H members.

Fourth came the Andover Forestry Preservers' Club, fittingly carrying out its name with a state forest fire truck.

The 4-H booth was one of the most popular at the Fair, arranged with characteristic 4-H order, displaying a variety of accomplishments wide in scope.

Appointment of New Home Demonstration Agent

The Trustees announce that Mrs. Mary M. McIntire has been appointed Acting Home Demonstration Agent in the Extension Service at this School, to fill the vacancy left by Miss Marion P. Crawford, Home Demonstration Agent, who resigned after serving for nine years.

Of Interest to Amateur Florists

With reference to a notice published last month in this paper, John Runnells, of Lynn, a former student of this School, and now engaged in the florist business, is willing and anxious to organize a society for amateur florists in Essex County. Any florists interested in meeting periodically to discuss pertinent problems are requested to communicate immediately with Mr. Runnells at 64 Verona Street, East Lynn, Massachusetts.

The School again offers its facilities whenever such a group is formed.

Aggie Students Awarded Ample Prizes at Topsfield Fair

Thirty-three dollars, and half as many ribbons were awarded this year to students of this School for superior exhibits at the Topsfield Fair.

Topping the list of student winners was John Kachadorian of Methuen, with two firsts, three seconds, and one third. Other winners were: Walter Lewis of Andover (two firsts, one second, and two thirds); Paul Marr, Rowley (two firsts, one second, and one third); Thomas Swiniarski, West Peabody (one first, two seconds, and one third); Charles Buck, Rowley (three firsts and one third); John Monroe, Andover (one first, one second, and one third); Michael Pickowicz, Billerica (two firsts, one second); Francis Sparks, Andover (one

(Continued on page 4, col. 2)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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Calendar

- September 6—Opening date for new students in agricultural and homemaking departments.
September 7—Opening date for upperclassmen in the homemaking department.
October 3—Opening date for upperclassmen in agricultural department.
October 14—Junior-Senior Field Day Trip.
November 4—Science Day.
November 5—Judging by Vocational Students at Massachusetts State College.
November 22—Graduation Day.

Agricultural Department Filled

To say that there were two hundred applications for enrollment in the School's agricultural department this year, is to state mildly that a "back to the farm movement" is obviously kindling.

Following is a list of the eighty who have been accepted, filling to capacity the new student enrollment:

Frank Baczewski, Robert Farmer, Howard Huntington, Leonard Leo, Daniel MacLean, James Melville, Andrew Murphy, John Shanahan, Joseph Spakas, Ernest Thayer, Donald Brown, all of *Lynn*; Richard Camarra, *Methuen*; Walter Damm, Richard Gilman, Francis Girard, William O'Meara, James Owens, Arthur Pentilla, Arthur and Victor Pohju, Charles Randall, Loring Trask, Robert Weeks, *Peabody*; Gordon Kallenberg, *Lynnfield*; Leonard Miller, Henry Perkins, Harry Sears, *Amesbury*; Frank Corbin, *Newburyport*; Elmer Aldrich, Leonard Briody, Arthur Jones, Charles Standley, *Beverly*; Edmund Colbert, Walter Dyleski, Richard Lavin, Gordon Morrison, Frank Pelczar, *Lawrence*; Chester Bucezek, Hartwell Daley, Harry Day, Clarence Nelson, Francis Flynn,

Alumni Notes

A daughter, Marcia Abbott, was born to Mr. and Mrs. C. Gardner Caverly at the Benjamin Stickney Cable hospital, August 11, 1932. Mr. Caverly is a graduate of the class of 1922.

Stanley Emerson, class of 1928, has charge of the poultry at the Alfalfa Farm in Topsfield.

Bradford Webb, a graduate of November, 1931, has finished his one-year course of study at the Stockbridge School of Agriculture at Amherst. During the past two summers he has been employed at Greycroft, the farm of Melville Grey, a graduate of this School in 1917, and now a Trustee.

Arдавast Kochakian, who has been engaged in the florist business for himself since his graduation in 1926, visited the School the latter part of August.

Nathan Hale, a graduate in 1928, is entering his senior year at Massachusetts State College.

Alfred Flint of East Lynn, a former student of 1929, is employed as a draftsman on the State highway.

Rita Senior, class of 1929, is doing dietetic work for a private family in Brookline and Byfield. Announcement was made in February of Miss Senior's engagement to Mr. Alfred Flint. They plan to be married shortly.

E. C. Bearce, a former student in 1927, is running his own dairy and poultry farm in West Newbury.

Henry Mallon, a former student in 1929, is employed at a gasoline station in Danvers.

Robert Haskell, Vincent Nelson, Chesley Norman, Milton Stevens, Clarence Nelson, *Salem*; Allen Downer, Lester Hills, Woodrow Pearson, *Newbury*; Robert Field, Clifford Stockdale, *Nahant*; Hollis Lufkin, *Gloucester*; Lionel Sheppard, Clinton Spencer, *Ipswich*; Roger Wheaton, *Manchester*; Herbert Amidon, William Auger, Lawrence Meister, Ernest Tarbox, *Saugus*; Richard Colby, Franklin Day, John Merrill, George Nelson, John Stepanchuk, *Haverhill*; Lorin Clark, *Merrimac*; Elizabeth Crosby, Tony Fiore, *Swampscott*; Ruth Fairweather, Gordon Hall, Dorothy Jennings, Allan Morse, Raymond Ouellette, *Andover*; James Goodale, *Middleton*; David Jewell, *Danvers*; Winfred McGlew, *Rowley*; Walter Snellen, *Marblehead*; Alden Parker, *Topsfield*; Francis Lewis, Ernest April, *Essex*.

New Students in Homemaking Department

Fifty-six new students in the homemaking school brings the total enrollment in that department up to ninety. The new students are: Eleanor Burbeck, Beatrice Ferguson, Edith Fuller,

News of the School at a Glance

September 6

Agricultural and homemaking departments were opened to new students.

September 8

Boys in the agricultural department attended the Topsfield Fair.

September 15

Prizes for clothing made during the summer home projects were awarded to the following homemaking students: (Seniors)—Kathryn Ingoldsby, *Salem*, first; Helen Hayes, *Peabody*, second; Eleanor Day, *Danvers*, third. (Juniors)—Janice Wray, *Methuen*, first; Irene MacDonald, *Salem*, second; Ellen Collins, *Newburyport*, third. (Freshmen): Vera Dickson, *Andover*, first; Elizabeth McTague, *Nahant*, second; and Grace Pramas, *Danvers*, third.

Mrs. Mary McIntire, Home Demonstration Agent, judged the clothing.

Miss Anna A. Kloss, Supervisor of Teacher Training in the State Department of Education, visited classes in the homemaking department.

September 21

H. Linwood White, Instructor in Floriculture in the agricultural department, lectured to the homemaking girls on the arrangement of flowers.

Madeline Johnson, Helen Smith, Mary Peterson, Eleanor Roy, Anna Burton, all of *Salem*; Marion Bird, Madeline Dullea, Marjorie Griffin, Catherine Lee, Beatrice Schneider, *Peabody*; Mildred Hardy, Pauline Reed, Ila Stafford, Mary Grover, *Rowley*; Muriel Johnson, *Andover*; Genevieve Pasquale, Helen Rogers, Roberta Thompson, *Lynn*; Lois Allen, Muriel Hoelzel, Lillian Ogden, *Middleton*; Marion Bell, Marion Burkhardt, Helen Ehrlick, Marian Gagne, Arlene Prescott, *Methuen*; Dorothy Boynton, *Groveland*; Elizabeth Gunning, Jeannette Lemay, Dorothy Loye, Ritamae Walsh, Evelyn Zanni, *Lawrence*; Edna Hayward, *Lynnfield*; Clara Robinson, *Beverly*; Clara Wilson, *Essex*; Mabelle Andrews, Elvira Belcher, Edna Goodale, Mary Guppy, Virginia Merrill, Priscilla Murney, Olive Pinney, *Danvers*; Loretta Dussault, June Hunter, *Nahant*; Fay McGrath, *Newburyport*; Vera Hunnewell, Blanche Merrithew, Margery Steeves, Dorothy Thorn, Phyllis Wadsworth, *Saugus*; Marjorie Silverberg, *Amesbury*.

Miss Constance Lovett of Beverly, a graduate of Simmons College, has been newly appointed instructor of Foods and Related Sciences in the homemaking department.

Upperclassmen in the homemaking department are busy using fruits and vegetables from the School farm for canning, pickling, and making jellies.

Preventing Losses in Stored Squashes

INFORMATION FOR GROWERS INTENDING
TO STORE FOR ONE MONTH OR
LONGER

Losses of 25% to 50% commonly occur in Massachusetts in stored squashes due to Black Rot and other decays. Although the fruits are infected primarily through bruises, cuts, and other injuries made at harvest time, yet the resulting decay spots do not become noticeable until two to four weeks afterwards.

A test conducted in 1931 in Hampshire County demonstrated that after two months of storage, squash rots could be reduced from 50% to 4% by disinfecting the fruit and the storage rooms with formaldehyde before the crop was placed in storage. For growers who intend to store for one month or longer, the following suggestions will be useful for preventing the usual waste in storage:

1. Allow the crop to remain on the vines until fully mature, if at all possible. Immature squashes decay more readily in storage than well matured ones.
2. Handle squashes with utmost care during harvest and hauling to storage, for most of the storage rots begin at cuts, bruises, and other wounds.
3. Use well-padded wagons and trucks for hauling the crop from the field.
4. Haul the crop to cover or storage as soon as possible after cutting from the vine. A rain on the piles in the field may cause severe infection of Black Rot. Do not protect piles of fruit in the field temporarily with squash vines; use corn fodder or other material instead.
5. Before harvest is begun, disinfect the walls, floors and racks of the storage rooms with a solution of one gallon of formalin (30% formaldehyde) in 50 gallons of water (1-50). A fruit or other power sprayer is both convenient and effective. Close the treated room over night, so that it will remain wet, and then open up to air and dry out.
6. Dip the squashes a few seconds in the same formula of disinfectant; allow them to drain and then either replace them in the open to dry or pile them in the well-ventilated storage room.
7. The shorter the interval between cutting from the vines and the disinfection of fruits, the better will be the chance for killing the Black Rot spores on the squashes before they

(Continued on col. 2)

Why Bother With Woodlot Management?

WELL-CARED-FOR TIMBER SURE TO PAY
WHEN DEMAND PICKS UP

April first is more than April Fool's Day! It is the day on which taxes are levied on your farm property. Is your entire farm producing income enough to meet this annual charge or is a portion of it becoming a burden on the remainder? Look over your farm account book and see how much revenue you received from the woodlot.

Unless you have the woodlot in shape to produce such income, you are paying taxes on land which is simply holding your farm together. Local woodlot products will be in demand according to the quality rather than the quantity.

Woodlot care returns very little profit at price levels now existing, but better prices may be expected in the future. The foundations of success are more often laid in hard times than in the easy money of prosperity.

R. B. PAMENTER,
Extension Forester.

can produce infection. Likewise, disinfection of the fruits will be more complete if the fruits are dipped soon after the handling during the haul from the field. Hence, if possible, cut and pile the fruits, haul them to the lot, disinfect them, and place them in storage all during the same day.

8. Growers who prefer to "cure-out" the crop in the open before storing should disinfect shortly after cutting from the vine.

O. C. BOYD,
Extension Plant Pathologist.

Bookshelf for those Interested in Soils and Soil Fertility

The following books and bulletins have been recommended by Instructor H. A. Mostrom, of this School, as being valuable for those interested in soils and soil fertility:

Farm Soils, by Worthen. Wiley and Sons, New York, publishers.

Fertilizers, by Voorhees. Macmillan Publishing Company, Boston.

Fertilizers and Crops, by Vanslyke. Orange Judd Publishing Company, New York.

BULLETINS

Green Manuring. Farmers' Bulletin No. 1250, Office of Publications, Department of Agriculture, Washington, D. C.

Standard Ratio Fertilizers. Massachusetts State College, Amherst, Mass., Leaflet No. 74.

When to Use Lime for Vegetable Crops. Massachusetts State College, Leaflet No. 52.

Soil Survey of Essex County. Available by application to the Essex County Agricultural School at Northorne.

Facts

According to the United States Department of Agriculture, a dilute nicotine sulphate spray applied to flowers and shrubs is harmless to plants and very offensive to animals, keeping them away from areas over which the spray is spread. Commercial preparations containing 40 per cent of nicotine sulphate should be used at the rate of one and one-half teaspoonfuls to a gallon of water. The spray evaporates and should be renewed after rains or about once every two weeks in ordinary weather.

Weather Summary, May-August, 1932

	May	June	July	August
Maximum temperature	91°	87°	91°	89°
Minimum temperature	31°	36°	46°	49°
Mean daily temperature	57.1°	64.1°	69.5°	70.2°
Five-year average ('27-'31)	55.2°	64.7°	70.3°	67.8°
Greatest daily range	46°	40°	57°	51°
Least daily range	6°	7°	12°	11°
Precipitation	1.11"	1.88"	2.03"	6.28"
Five-year average ('27-'31)	3.11"	4.03"	2.63"	3.94"
Total to September .....	.....	.....	.....	25.76"
Deficiency for year to date (Sept. 1) .....	.....	.....	.....	45"
Average relative humidity (S. A. M.)	65.5%	73.3%	74.3%	85.6%
Number days rain fell	5	9	8	8
Clear days	14	9	17	21
Partly cloudy days	13	12	11	8
Cloudy days	4	9	3	3
Total hours sunshine	298.5	271.5	312	312.5
Five-year average ('27-'31)	230.7	267.5	379.3	255.4
Per cent sunshine	65.9%	50.7%	67.5%	72.5%
Total hours to Sept. 1 .....	.....	.....	.....	1780.0
Five-year average to Sept. 1 .....	.....	.....	.....	1748.8

The summer has averaged to be a dry one, though the heavy rainfall for August brought the summer months total to 11.3 inches as compared to 13.7 inches for the five-year average. There was an unusual amount of sunshine in May, July and August, with the result that the year is now considerably above the five-year average figure.

The last killing frost at the School occurred June 8, the latest date in eight years. The relative humidity on the whole has been much lower this summer than last, which is one of the most potent reasons why the weather this year has been more comfortable than last year.

Home Nursing Classes

Three groups in Middleton, Foster's Dam (Swampscott), and South Groveland, have already started the Home Nursing project conducted by Mrs. Mary Roundy, R. N.

Applications for spring classes in this project may be sent in now.

Nutrition, Major County-Wide Project for Fall

"Our Money's Worth," a nutrition project carried by two communities last spring, is to be a county-wide project this fall.

Miss May E. Foley, State Nutrition Specialist of Massachusetts State College, has given Essex County one date in each of the following months: October, November, December, and January.

The following quotations were taken from individual reports on "Our Money's Worth."

"This project has helped in planning meals and in buying."

"The information about cheap cuts of meats, also the buying of canned goods and the use of evaporated milk, has helped greatly."

"Children are willing to eat when they receive credits on score cards."

"How to cook more than one food when using a gas oven, also to cook a larger amount of vegetables to use as salads later, have been valuable facts."

Leaders from Topsfield, Georgetown, Groveland, South Groveland, West Boxford, West Newbury, Boxford, Lawrence and Rowley (Danielsville), have already signed for this project. Meetings will be held in Groveland on Friday, October 14, November 4, December 2, and one in January.

Vegetable Plates

Prepared by MAY E. FOLEY,
Extension Specialist.

Vegetable plates are enjoyed by many persons. Others who have cared little for them, often find them very acceptable if the vegetables are properly cooked and combined with other foods in the meal. Some rules for preparing vegetable plates are:

1. Have variety in color (all green vegetables would not be interesting).
2. Use good color combinations.
3. Have variety in texture.
4. Serve egg, milk, cheese or bacon in some form. These make a better balanced meal and give a feeling of satisfaction. Vegetables alone do not "stay by" for very long.

Some suggestive combinations are: Buttered carrots, buttered spinach, potatoes au gratin.

Buttered green beans, buttered

(Continued to col. 3)

New Clothes From Old

Communities interested in carrying for their minor project, "New Clothes From Old," this fall, should notify Mrs. Mary McIntire, Acting Home Demonstration Agent, at the Agricultural School.

The project is conducted in three all-day meetings or four afternoon meetings, according to the communities' desires. These include lessons in renovation problems, discussions, and work on remodeling old garments, and an optional exhibit program.

(Continued from page 1 col. 1)

old corns and roots. Some small growers remove the husks from the new corns, and this doubtless improves penetration by the fumigants suggested. The cost of this practice to large growers would not seem justified.

The simplest, cheapest and safest fumigant is naphthalene flakes, intermixed with the corns at the rate of one ounce to one hundred corns. The corns are placed in a paper bag, box or barrel, layer by layer, and the flakes sprinkled among them. So tight a container as a tin can would hold moisture and induce sprouting. This treatment has given complete control of all stages of the insects, including the eggs, and corns so treated for more than six weeks showed no injury from the flakes, as they grew normally when planted. Probably four to six weeks fumigation would thoroughly rid the corns of thrips and they could then be spread in their storage racks. It goes without saying that the storage should be cleaned and freed from thrips that may have hung over on old corns.

Large growers with special storages separate from their dwellings will be able to fumigate with calcium cyanide, commercial cyanogas, or an ethylene dichloride-carbon tetrachloride mixture, providing such storages can be made tight during the period of fumigation.

Hot water baths and various dips, dusts and smudges have been tried with and without effect.

H. LINWOOD WHITE.

(Continued from page 1, col. 3)

third); Alfred Webb, Andover (one first, one third); John Peatman, Ballardvale (one third); John Lynch, Andover (one first, one third); Arthur Basso, Andover (one first); Alexander Dion, Salem (one first); Alfred Caproni, Lynn (one second); James Smith, North Andover (one third); and the Future Farmers Association for their roadside stand exhibit, first prize.

Extension Department Remembered by Miss Crawford

Late in August, the Women's Division of the Extension Department was the recipient of an unusual Roseville pottery vase, sent as a gift by Miss Marion P. Crawford, former Home Demonstration Agent.

More Milk, Fruit for School Lunch

"More milk, more fruit, more vegetables, and more dark bread," is a slogan for mothers to follow in packing school lunches, suggested by Miss May E. Foley, nutrition specialist of the Massachusetts State College. Observation of the general type of lunches carried by school children indicates that these foods should be increased in the average school lunch in order to supply the needs of children.

In packing a school lunch for her children, the mother should remember that the lunch should contain one-third of the youngster's food needs of the day, Miss Foley suggests.

A thermos bottle filled with hot soup or cocoa is a good addition to the ordinary box lunch, when a hot dish cannot be obtained at school.

Sandwiches, which are apt to constitute the main part of any box lunch, should be made from whole wheat or rye bread at least half of the time. Fruit of some kind, either fresh, cooked, or canned, should be included in every lunch. The wise mother will be sparing in the cake, pie, candy, and other sweets that she includes in the school lunch. Milk, or cocoa made with milk, should be a part of every meal, including the lunch at school.

Suggested menus for school lunches, together with items that should be included and others that should be left out of the school lunch, are contained in a leaflet, "The Good School Lunch," which is available without cost at the Extension Service, Massachusetts State College, Amherst, Mass.

beets, creamed potato, hard-cooked egg sliced lengthwise.

Plain boiled potato with parsley, dropped egg, Swiss chard, diced turnip, tomato salad.

Baked stuffed tomato, baked potato, escalloped onions with cheese, raw carrot and cabbage salad.

With any of these dinners, a hearty dessert may be served. Cherry pie, fresh berries with cream, custard, chocolate pudding or ice cream would go well with any of these combinations. A baked dessert may well be served when any other part of the meal is to be prepared in the oven.

ESSEX FARMER AND HOMEMAKER

Published Monthly by the Essex County Agricultural School

VOL. 13

HATHORNE, MASS., OCTOBER, 1932

NO. 10

Future Farmers of America

The Future Farmers of America Association, now nationally organized, is the outgrowth of several organizations originating in Virginia, Wisconsin, New Jersey, New York, and Ohio. All states but one are now represented by Future Farmers as are Hawaii, Puerto Rico, and Cuba.

Late in 1930 a Massachusetts association known as the Young Farmers of America was granted membership in the national organization. Students in this School belonging to the F. F. A. find it to their advantage to participate in public speaking contests, to study savings accounts and thrifts, to support county fair exhibits and to hold seasonal fruit and vegetable sectional meetings. Added purposes of the association are to conduct project tours, to hold an annual science day, to promote interest in cooperative buying and selling, to conduct community improvement projects, and to develop leadership through activities.

Their cause seems a worthy and practical one, and may be the means of developing farmers whose success will lie in the cooperative spirit with which they now work.

TB Cattle Test Voted Unanimous in Essex County

A part of the five-year plan adopted in September, 1927, by a committee of dairymen, has reached completion with all the towns in Essex County having sent in petitions to the Bureau of Animal Industry requesting that all cattle be tested for tuberculosis.

Meredith Radiant, 335147, a cow in the herd of Edward Wigglesworth of Topsfield has finished a new official record for production with 11170.2 pounds of milk and 598.5 pounds of fat in class F. This entitles her to entry in the Advanced Register of the American Guernsey Cattle Club.

The Lear Farm

The Lear Farm and Roadside Market in Danvers has grown steadily each year. Mr. Frederick Lear, a former supervisor at the General

THE LEAR STAND



Electric plant in Lynn, reiterates again and again to his attendants: "Serve our customers only the best. If it isn't the best don't sell it." On this premise the family has built up a successful business.

The story of the Lear farm and modern roadside market is unique, the central figure being Harry Wellesley Lear. In preference to studying music at the New England Conservatory he entered this School at the age of sixteen to pursue agricultural ends.

During the summers of 1924-1925 he was employed as gardener at the Fielding Estate in Swampscott and with encouragement from his parents he established a home flower garden and nursery for seedling plants. He sold the products of his garden to neighbors and friends.

Having now found his life's work, he decided to obtain the best possible training and with the aid of Director Smith he obtained employment at the H. A. Dreer Nurseries at Riverton, N. J., one of the largest and best known commercial flower growers in the country. With the necessary experience and a final year of study at the school he established his own roadside stand. Operating this place of two and a half acres for one sea-

(Continued on page 2, col. 1)

Plow Under or Pull Up and Burn All Corn Stubble by December 1

An Act Relative to the Disposition of Corn Stalks and Stubble in Connection with the Suppression of the European Corn Borer. Be it enacted, etc., as follows:

Section 31A. In any town or part thereof in which an order issued under the preceding section in connection with the suppression of the European Corn Borer shall be in effect, every person in possession of land on which corn of any kind has been grown, shall, not later than December first of the year of its growth, plow, or cause to be plowed the field in which it was grown, so as to bury the stubble to a depth of at

least six inches, or pull up said stubble or cause it to be pulled up and destroy it, or cause it to be destroyed, by burning, and every person having in his possession corn stalks shall, not later than April tenth of the year following that of their growth, completely dispose of such corn stalks by using them as fodder or by burning them. Whoever violates any provision of this section shall be punished by a fine of not less than twenty-five nor more than five hundred dollars.

Try This Pump

The Extension Department, with headquarters at this School, has a cyanogas pump available for anyone who desires to try it. This is excellent for driving off mice or rats in orchards or buildings.

If interested, please communicate with the County Agent, F. C. Smith, Hathorne.

Mrs. Edith Stearns Morrill, a graduate of Simmons College, has recently been appointed to teach foods, clothing, textiles, and dietetics in the homemaking department. Mrs. Morrill has had a long and successful experience in high school teaching.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

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Calendar

November 4—Science Day.

November 5—Judging by Vocational Students at Massachusetts State College.

November 11—Armistice Day.

November 22—Graduation Day.

November 24—Thanksgiving Day.

(Continued from page 1, col. 2)

son he realized that he needed more "land to farm." In November, 1927, Harry received his diploma and before another Spring came he had purchased a ten-acre farm. Here, with the aid of his father and two brothers, two large stands have been erected and a comfortable house has been built on the knoll just back of the large maples which shade the stands.

The business has now reached such proportions as to require the attention of the father, and three sons, Harry, Fred, and Edwin. Harry is the originator of the project and his knowledge of quality fruits and vegetables is used to good advantage in making purchases for the stand.

Athletics

The Aggie eleven has faced two of its seven opposing teams and stands one up having defeated Malden's seconds 12-0 and losing to Salem's seconds 6-13.

Games are scheduled for:

October 17, Medford (seconds).

October 21, General Electric Apprentices.

October 29, Wakefield.

November 11, Stockbridge Agricultural School.

November 19, Marblehead.

November 5 is open.

Alumni Notes

Merritt Blake, class of 1931, is doing general farming in Peabody.

Andrew Conkos, of Lynn, class of 1925, is coach of all sports at the Sharon Springs High School, New York.

Louise Jameson, class of 1930, has started a course in training at the Essex County Sanatorium.

Kathleen Connelly, class of 1930, recently entered St. Johns Hospital in Lowell.

Marion Cloutier of the 1932 class is taking a post graduate course at the new Lynn English High School.

Word has been received that Frances Pietrowski, '32, is studying at Lynn Burdett.

Dorothy Cushman, '32, has entered Wilfred Academy, a school for hairdressers in Boston.

Rita Welch, '32, is household assistant for an Andover family.

Stanley Chlebowski, a former student, has recently been appointed county cow tester to fill the vacancy left by the resignation of Lawrence Westcott, class of 1932. Westcott is now employed as gardener for a family in Andover.

George Fuller, class of 1929, visited the School in September.

Harold Holden, class of 1922, is employed as cow tester at the Bedford Farms Dairy.

Charles Dort, class of 1930, is employed on the estate known as "Blighty" at Eastern Point, Gloucester.

Roland Daggett, 1930, is working on the estate of Judge Moore at Pride's Crossing.

Kenward Griffin, it has been learned, is employed at "Orchidvale" in Manchester.

Isabella Shinner and Ruth Thomas, both of the class of 1932, have returned to act as laboratory assistants in the homemaking school.

Several favorable comments have been made about the interest Nathan Hart, class of 1930, has taken in seeding down the area on the School grounds between the main building of the poultry plant and the Essex laying house. In addition he has constructed a small rockery, and bordered the area with bright annuals. Nathan is student foreman of the School poultry plant.

On October 13, a child, Lee Winslow, was born to Mr. and Mrs. Winslow Dunnells of North Andover. Mr. Dunnells is a graduate of the class of 1923.

Miss Ruth Estes, formerly of Groveland, and a member of the 1919 class, has for the past five years been Supervisor of Home Economics at Southern College (Junior), in St. Petersburg, Virginia.

News of the School at a Glance

October 5

Students in the homemaking department prepared and served a luncheon to members of the Essex County Board of Trade who held a business meeting at the School.

October 6

Prizes for canned foods and for notebooks on meal planning as carried out during summer projects, were awarded to the following homemaking students: (Seniors): Isabella Shinner, Methuen, first; Lillian Degenhart, North Andover, second; Aleena Bradford, Newburyport, third. (Juniors): Eileen Finch, Marblehead, first; Amelia Grover, Rowley, second; Alice Nichols, Middleton, third. (Freshmen): Victoria Townsend, Saugus, first; Elizabeth Matheson, Cliftondale, second; and Evelyn Cail, Peabody, third.

October 10

Seventeen High School Specials were admitted to the Homemaking School, bringing the enrollment of that department up to one hundred and nine.

The new students are:

Wilma Corliss of Andover; Frances Whiteley, West Andover; Helen Troy and Elizabeth Akerley, Beverly; Monica Doyle, Margaret Kelley, Virginia Morrison, and Mary Burke, Lawrence; Minerva Ambrose, Danvers; Mary Ryan, Nahant; Frances MacDonald, Gloucester; Marjorie Brackett, Marblehead; Ruth Osborne and Marjorie Ford, Salem; Thelma Healey, Lynn; Helen Wood and Jean Fisher, Swampscott; Priscilla White, Peabody.

Nuptials

Otis Curtis, class of 1931, of Gloucester, to Miss Bessie Manchester, '31, of North Andover, on September 15, 1932. They are now residing in Spencer.

Lawrence Westcott, class of 1931, formerly of Melrose, to Miss Ruth Frost, '31, of North Andover, on October 2, 1932. Their home will be in Andover.

Herbert Henderson of Andover, class of 1930, to Miss Ruth Irene French of Lawrence, October 8.

Mr. George B. Moulton, Jr., of Danvers, to Miss Miriam Hilton (class of 1929), on Saturday, October 15. Before her marriage, Mrs. Moulton was employed as an occupational therapist at the Danvers State Hospital.

GRADUATION NOVEMBER 22

Are Your Buildings in Condition?

This is the time of year to get your farm buildings in condition before bad weather sets in. A surprising amount of cold air can come in through a broken or cracked bit of glass and fine snow will sift in. If the muslin curtains on the front of your poultry houses have holes in them they should be recovered.

Any pipes that are near the surface of the ground should be covered with leaves, pine needles, or mulch to keep them from freezing. Plug up that hole the rat crawled through last winter.

Storm windows are great helps toward saving on the fuel bill. If you have any don't fail to put them on.

Blinds that are loose can be very annoying on a winter night when the wind blows. Make them fast now before they do slam.

A little felt weather strip will often help stop the draft around a door and it is very inexpensive.

R. E. KNOWLTON,
Instructor in Farm Mechanics.

Apple Storage

As October draws to a close, it is time to consider the storage of apples.

It is essential to remember that apples need a cool, moist temperature and conditions which will provide for pure air and ventilation.

Cellar storage requires a temperature well near 32° F., and, with the exclusion of warm air, decay may be prevented. High humidity, 80-90% of moisture in the air, may be achieved through a well-sprinkled floor. Darkness is the remaining condition called for in storing apples.

These three essentials, strictly adhered to, will insure safe storage for large or small quantities throughout the winter months.

Fruit Unit Course in Prospect

If there are enough enrollments, the Extension Department plans to offer a short course in the growing of small fruits including strawberries, raspberries, blueberries, and blackberries. There will be three lessons held in the evening in November, at this School. Whether or not the course will be conducted depends upon the number enrolling.

If interested please communicate with County Agent F. C. Smith, Hathorne.

Are You Checking the Leaks

Water leaking from a faucet in a stream the size of a common pin wastes about 150 gallons a day, engineers of the United States Department of Agriculture found. Even a leak of only one drop a second makes about 4 gallons a day. This means a lot of water is often wasted in hot weather when the well or spring on the farm may be low.

Storage of Crops

C. M. STEARNS

Conservation of crops at this season of the year can be cared for through storage, and now is the time to store. Apples, potatoes, cabbage, carrots and the root crops in general should be stored in a cool, damp place. The barn cellar makes an ideal place for such a storage but if these conditions are not available a cold closet in the cellar where a window is found makes the next best location. The roots can be stored in bins or in piles on the floor with a light covering of moist sand or soil, while the cabbage may be placed on shelves above the other crops or buried in soil in one corner of the room.

Leave the window in the storage room open at this time of year for ventilation which is most important. When the temperature gets down to 30° F. less air should be allowed. Sprinkle the floor with water occasionally to furnish a moisture which will keep the roots or crops from drying.

Another common storage facility, if the above is impossible, is an outside pit. The barrel pit is most common and can be made by laying a barrel on its hoops and burying it so that only one third of the barrel remains out of the ground. It is a good plan to lay the barrel in a bed of leaves or straw and to spread leaves over the barrel before covering it with soil. Sufficient soil should be placed over the top of the barrel to keep out frost. Insert a pipe into the opening of the barrel to allow for ventilation and keep the rest of the barrel covered except when opening for roots.

In storing onions, a cool, dry storage place should be found. Squash keeps best in a warm, dry place, such as on shelves near the heater in your cellar or near the attic chimney.

Books for Beekeepers

In addition to the list of agricultural books, the *Farmer and Homemaker* prints this month books and bulletins for the beekeeper, as recommended by Instructor G. A. Meigs:

Starting Right With Bees by Rowe. A. I. Root Company, publishers.

Beekeeping by Phillips. MacMillan Company.

Productive Beekeeping by Pellett. Lippincott.

A. B. C. and X. Y. Z. of Bee Culture by Root. A. I. Root Company.

American Honey Plants by Pellett. American Bee Journal.

Hubers Observations on Bees by Dadant. American Bee Journal.

Bulletins:

Bees, U. S. D. A. No. 447 Farmers Bulletin.

Honey and Its Uses in the Home, U. S. D. A. No. 653 Farmers Bulletin.

Commercial Comb-Honey Production, U. S. D. A. No. 1039 Farmers Bulletin.

Swarm Control, U. S. D. A. No. 1198 Farmers Bulletin.

United States Grades, Color Standards, and Packing Requirements for Honey, U. S. D. A. No. 24 Department Circular.

Requirements for the More Important Grades of Honey. (This chart supplements circular 24.) U. S. D. A. Leaflet.

Unit Courses

The poultry unit course sponsored by the School has been in full swing since October 6. Members of the class meet every Tuesday and Thursday evening to better their knowledge of modern poultry problems. Instructor J. Stanley Bennett requires that all members own or have the care of enough poultry to make their course a practical one.

Dairy Unit Classes, under the instruction of J. E. Eastwood, are scheduled to start October 19.

Facts

Fall is the best time for seeding a new lawn. Leaflet 85, "Lawn Management Facts" issued by the State College at Amherst, contains suggestions on starting and caring for lawns. It is available free of charge.

Massachusetts State College poultrymen say that for best ventilation during winter months poultry houses should have narrow openings high in the front wall.

At least half the sandwiches in a child's school lunch should be made of whole grain bread, according to M. S. C. food specialists.

**NATIONAL BEE
WEEK
NOVEMBER 7-13**

Essex 4-H to the Front

An indication of the great amount of interest shown by Essex County 4-H club members is revealed in their results at the Fairs this year. Two hundred and fifty prizes totalling \$276.50 were awarded to them at the Topsfield Fair.

Several members were inspired to exhibit at Brockton this year. As a result there were sixty-three prizes won and over \$60 in cash so it really was worthwhile. Not only that but Essex had three girls in the Singer Sewing Machine Contest, Blanche Ilsley of Georgetown; Helen Walker, N. Andover; and Lillian Knott, Groveland. Blanche Ilsley placed second in the Home Economics contest, winning a \$50 scholarship. In the Cake Making Contest Lillian Knott placed second. There is to be another sectional contest in Amherst and those scores compete with the ones at Brockton. If no one scores higher than Lillian she will get a \$45 scholarship.

The Essex Poultry Judging Team, consisting of Proctor Houle, Newbury; John Chadwick, Buxford; Wendell Stackpole, Haverhill, did very well, winning first at Marshfield, fourth at Topsfield, third at Brockton, and sixth at Springfield. The vegetable judging teams also did well: first at Marshfield (and in fact won \$18 out of the \$20 offered at Marshfield), second at Topsfield, and tied for third at Brockton.

All in all it looks like a tip top season.

New Clothes from Old

Four clothing groups are meeting in the county during the present season. Newbury, Ipswich, Haverhill (Rock's Village), and Rowley (Danielsville) are undertaking the New Clothes From Old project.

This is a very fine project for the homemaker at this time when the necessity for utilizing garments that have been stored away is most pressing.

Suits are being made into dresses; old coats cut down for the children; and fur jackets which are very much out of date being made wearable as well as attractive.

Application blanks will be sent to any groups expressing a desire to carry this project.

M. M. McINTIRE.

4-H Service Club Meeting

The Essex County 4-H Service Club will hold a fall meeting at this School on Saturday, October 29.

As this is to be a meeting to initiate new members a large attendance is expected. A new initiation ceremony in the form of degree work has been instigated by one of the members which will add dignity and color to the program.

School Lunch Box

On Tuesday, October 4, the Acting Home Demonstration Agent, Mrs. Mary M. McIntire, discussed before the West Gloucester Parent Teachers Association "What the Good School Lunch Box Should Contain."

The meeting, held in a rural district of West Gloucester, was attended by a group of forty-one mothers and several fathers.

Outlines presented to each member at the close of the meeting stressed emphatically that the school lunch should contain:

1. Foods to build, such as milk, eggs, cottage and other cheese, fish, meat, and chicken.
2. Foods to stimulate growth and promote health, such as milk, tomatoes, cabbage, carrots, spinach, oranges, and lemons.
3. Foods to regulate the internal activities of the body, such as vegetables, fruits, and milk.
4. Foods to provide sufficient energy for all activities of the child, such as bread, sweets, cereals, and butter.

Individual lunches and methods of packing an attractive basket as planned by May E. Foley, State Nutrition Specialist, were also suggested.

Organization of New 4-H Clubs and Projects

Four new clubs have been organized in Cliftondale to start the 4-H year. Under the leadership of Mrs. Kenneth Odiorne and Miss Edna Staples, twenty girls will carry on clothing, food, and home craft projects.

Byfield showed a great deal of enthusiasm at the reopening of 4-H clubs in their town. Three new projects have been started there including poultry, home craft, and forestry. Byfield has a total of eight clubs.

Mr. Shute, County Club Agent, hopes to organize new clothing, handicraft, and food clubs in Amesbury and Merrimac.

Methuen, Andover, and North Andover have launched their club program for, another big year. North Andover reported over sixty per cent of former club members who have enrolled again this year. New memberships are soaring to twenty-five.

Home Nursing

The Fall groups in Home Nursing under the direction of Mrs. Mary Roundy, R. N., of the School Staff, are being held in Middleton, South Groveland, and in the Swampscott Machon School.

Applications for Spring classes are now acceptable.

Essex Judging Teams Excel at Fairs

Judging teams at Topsfield and Brockton Fairs placed rationally and well this year.

Teams' and individuals' scores of this School's competitors at Topsfield follow:

Vegetable Judging—Team made up of Ralph Broughton, Jack Wong, and Forrest Haynes, first place, with Ralph Broughton winning second individual, Forrest Haynes, third, and Caesar Rosi fifth.

Fruit Judging—Team: John Kachadorian, John Quinn, and Carleton Symmes, second place, with John Kachadorian first among individuals and Carleton Symmes sixth.

Flower Judging—Teams: Dora Winchester, James Smith and Kenneth Nolan, winning first place; William Tinsch, Hyman Weinstein and Alexander Dion, second. Individuals: Lucille Legasse first, Dora Winchester second, and James Smith third.

Livestock Judging—Team: Walter Lewis, Chester Dunn, and Olin Donnelly, placing third. Individuals: George Lambert third, Walter Lewis fourth, and Arthur Bulgaris fifth.

Poultry Judging—Team: Walter Lewis, Ralph Broughton and Thomas Swiniarski, placing seventh.

Brockton Fair

Vegetable Judging—Team: Ralph Broughton, Jack Wong and Forrest Haynes, placing second. Individuals: Ralph Broughton second, Caesar Rosi fourth, and Forrest Haynes fifth.

Poultry Judging—Team: Walter Lewis, Ralph Broughton and Thomas Swiniarski, placing sixth.

Eastern States Exposition

Poultry Judging—Team: Ralph Broughton, Bryce Ham, Fred Anderson, sixth place among thirteen contesting teams. Individuals: Thomas Swiniarski, sixth and Ralph Broughton, tenth against forty-seven competitors.

Our Money's Worth

On Friday, October 14, Leaders from Topsfield, Groveland, South Groveland, West Newbury, West Buxford, Rowley, Lawrence, and Peabody assembled in Groveland for the first nutrition meeting to consider the project: "Our Money's Worth."

More of these classes for Leaders in other parts of the county will be scheduled for early February.

The nutrition project will be an important one this winter when getting one's money's worth will be a rigid necessity.

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NO. 11

Graduation

Sixty-five diplomas and certificates will be awarded to students of this School, at the seventeenth annual graduation exercises to be held at the Peabody Institute, Danvers, on Tuesday, November 22, at 2 P. M.

Following is a list of the candidates for graduation:

William Bamford, Middleton; Sidney Batchelder, Dorrahl; Berry, Richard Heider, Walter Lewis, Andover; Donald Bentley, Milton; Hason, Methuen; Francis Biery, William Hay, Jr., Milton; Snow, Lawrence; Carlton Brown, George Perkins, Everett Silva, Carl Swanson, Rockport; George Bulgaris, James Bulgaris, Newbury; William Chase, Stephen Hanson, Rowley; Loring Clark, Allen Jernyn, Marblehead; William Costley, Milton; Hamson, Milton; Soper, Lynn; Irving Day, Carleton Symmes, Saugus; Donald Driscoll, Peabody; Kenneth Hagar, Wenham; Albert McCourt, Salem; Robert Peterson, Gloucester; George Smith, Hamillon; Roland Wagner, Haverhill.

Candidates for diplomas in the Homemaking Department:

Margaret Bond, Methuen; Emma Bourdelais, Lawrence; Leona Brown, Eleanor Day, Dorothy Welch, Danvers; Emma Callan, Dorothy Hing-

(Continued on page 3, col. 1)

Amherst Contests

At the Interscholastic Judging Contest held in November at Amherst, Essex County Agricultural School was well honored in placing two first individuals in the fruit and milk judging contests. With Arthur Bulgaris, Woodrow Follett, and Chester Dunn on the milk judging team, it won first place. The School's fruit team tied for second.

John Kachadorian, class of '33, won for the second successive year, first medal for rating as highest individual scorer in fruit judging. Arthur Bulgaris, '33, and Woodrow Follett, '33, placed first and third respectively in milk judging.

The School Museum

The vehicle pictured below is an old ox-wagon, built a century ago by Daniel and Sewall Towne of Topsfield. It was loaned to the Essex County Agricultural museum by Miss Grace Averill and Mr. Frank Towne.

After the death of Daniel Towne in

CENTURY-OLD OX WAGON



ANTIQUITY IN SCHOOL MUSEUM

1890, the wagon rested under a barn until 1931. At that time, drawn on its own wheels, which were badly decayed, it was moved with some difficulty over the Newburyport Turnpike to this School.

During the early part of 1932 the wagon was carefully repaired in the School shop. As much of the original structure as was fit has been kept, and the tires, after standing for forty years in the mud, were re-set. The body was in excellent shape, requiring but few repairs. All parts except the ironwork showed that the wagon was entirely home-made. It is assumed that a village blacksmith attached the iron pieces.

The body of the wagon measures eleven feet, five and one-half inches in length, four feet in width, and two feet in height. The "neb," or pole, is four feet square at the end. The axels are wooden, made of "eight by eight inches" material, and the great hubs measure forty-five inches in circumference, ten in diameter, and are sixteen inches thick. The material used was native oak.

One may question the need of the

(Continued on page 4, col. 1)

Greens for Christmas

Caution is advised in preparing Christmas greens for marketing as the Yuletide season approaches. A few wreaths, a few trees, a few attractive sprays, and a few tartan bags of treated pine cones will help increase the family budget. With

too great quantities of greens on the market a loss will be incurred, not only to the producer but to the whole community.

With pine, juniper and spruce gathered, operations for wreath-making may be started. With a 49 or 50 inch branch of willow, lap the ends about two inches and tie with stout green twine or wire. Then wire on the pine, hemlock, juniper or fir branches close together. Balsam holds its needles longest and juniper gives a silvery color. Cones of various kinds and sizes may be added and gilded and silvered.

White pine cones may be treated with chemicals, which, when burned in the fireplace, give attractive colors to the flames. The chemicals used are copper sulphate, strontium nitrate, and common salt. The copper sulphate makes a greenish-blue flame, the strontium nitrate gives a reddish flame, and the common salt gives off a yellow flame. Two pounds of the chemical dissolved in a gallon of

(Continued on page 2, col. 1)

Green and White

With the November issue, the "Green and White," our School magazine, embarks on a new venture. For the first time in its twelve years of history the magazine will be published twice during the year, in November and March.

A new policy has also been instituted whereby the editors are selected from the entire student body on a competitive basis.

It is the desire of the present board of editors to maintain the high standard of the past issues and to enlist the hearty co-operation of all in the new venture.

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Francis C. Smith Horace J. Shute

Calendar

November 22—Graduation Day.
November 24—Thanksgiving Day.
November 29—Essex County Dairy-men's Association Banquet and Business Meeting.
December 16—Christmas Vacation until January 3.

Announcing A New Policy

The Board of Trustees announce a new policy regarding this paper, the Farmer and Homemaker. After January first there will be a small subscription price of twenty-five cents per year. This has been a free publication since its first issue in May, 1919, thirteen years ago. It seems now desirable in line with economy to institute this change. No particular variation in content or policy is now anticipated. Every effort will be made to convey accurate information and news concerning the School and the Agricultural and Homemaking interests of the County. We urge your continued co-operation and support.

—FRED A. SMITH.

Candidates for 1932 Prizes

Candidates for several groups of prizes awarded each year at the graduation exercises are listed below:

The R. S. Bauer Awards for Excellence in Agricultural Projects: Walter Lewis, Austin Basso, Andorer; Arthur Peatman, West Andorer; Fred Anderson, Beverly; George Smith, South Hamilton; Henry Richardson, Lawrence; Olin Donnelly, West Newbury; Chester Dunn, Rourly.

The Mrs. R. S. Bauer Awards for Excellence in Homemaking Projects: Margaret Beatty, Rose Sacco, Lawrence; Ruth Thomas, Salisbury; Isabella Shinner, Methuen; Lillian Denhardt, North Andorer; Kathryn Ingoldsby, Eileen Murphy, Salem.

Alumni Banquet and Dance

A turkey banquet will be served to the Aggie Alumni who re-une on November twenty-second after the Graduation Exercises.

Classes of 1917, 1922, and 1927 will have their fifteenth, tenth, and fifth reunions this year, but all other classes are invited.

Manuel's Black and White Orchestra will play for dancing, and Hunker Cole will strum on his guitar.

According to Horace J. Shute, Alumni secretary, this is going to be a real time for real people.

And there'll be a day left to rest up for Thanksgiving

Alumni Notes

Esther Belair, class of 1930, has recently been appointed instructor in first year Foods at the Industrial School in Lawrence.

Word has been received that Fred H. Walker, Jr., class of 1927, is finishing his last year at Kansas State Agricultural College, in Manhattan, Kansas. In connection with entomology, his major study, student Walker has concentrated much thought on the insects which attack sunflowers. Next Spring it is his intention to work up the Trichoptera of Kansas. Among his acquisitions is a large collection of Tiger beetles.

Mrs. Luther W. Martin (formerly Margaret Foster of the class of 1928) has recently been married to Mr. J. W. Belanger of Lynn. Their home is at 92 South Common Street, Lynn.

William R. Chase, of the class of 1932, accepted, early in November, a position with the Windsor County Co-operative Farmers' Exchange, at White River Junction, Vermont.

Field Trips

For purposes of observation the Senior fruit and poultry classes recently visited with Instructors C. M. Wood and J. Stanley Bennett, Apple Crest Orchards, Hampton Falls, N. H., Woodmont Orchards, Derry, N. H., the Bittersweet Poultry Farm, Stratham, N. H., and the poultry farm of Albert Elwell in West Newbury.

Floriculture students visited, with Instructor White, the greenhouses of James Skinner, Marblehead; Chapin Legal, Danvers; Ashton Danforth, Peabody; and John Runnells, Lynn.

The Governor John Endecott Awards for Superior Projects in Horticulture:

John Kachadorian, Methuen; Gilbert Wallace, Bradford; Leo Poisson, John Lynch, Andorer; Virginia Larabee, Robert Bartlett, Franklin Edwards, Beverly; Kenneth Numan, Albert Numan, Dora Winchester, Saugus; William Costley, Lynn; Alexander Dion, Salem.

News of the School at a Glance

October 21

At the first joint assembly of the School year, Mr. Richard Flannigan illustrated with notable slides of shrines and landmarks, an equally noteworthy lecture, entitled "Massachusetts Historical."

October 24

The following class and Future Farmers of America officers were elected for the ensuing year:

Seniors: President, Robert Bartlett; Vice-President, Irene MacDonald; Secretary, Dorothy Williams; Treasurer, Nathan Clark.

Juniors: President, Sydney Porter; Vice-President, Gertrude Brown; Secretary, Lucille Legasse; Treasurer, Donald Cooper.

Sophomore Boys: President, Huntington Howard; Treasurer, Francis Sparks.

Freshman Boys: President, Chesley Norman; Vice-President, John Stepanchuk; Secretary, Robert Field; Treasurer, Clinton Spencer.

Freshman Girls: President, Dorothy Lowe; Secretary, Dorothy Thorn; Treasurer, Genevieve Pasquale.

P. F. A.: President, Robert Bartlett; Vice-President, Walter Cragen; Secretary, Dora Winchester; Treasurer, Ralph Broughton; Reporter, Clarence Patterson; Executive Committee, Donald Brown, Chester Ellis, and Bryce Ham.

October 26

Arthur W. Lalime, industrial secretary for the Lynn Chamber of Commerce, addressed the girls of the homemaking department, describing to them the various processes many articles of industry pass through from their start to the finish.

November 9

Miss Hazel Metcalf, visiting housekeeper for the Associated Charities of Lynn, discussed with girls of the homemaking department the value of their training in the line of work with which she is connected.

(Continued from page 1)

water will make the correct solution. Dip the cones in this solution, allow them to dry, place them in red tarlatan bags and they are ready for sale.

In the manufacture of wreaths and decorations use spruce or balsam fir, ground juniper, balsam fir branches, white pine branches, alder berries, and many kinds of cones, rather than ground pine or holly or some of the other fast disappearing evergreens. In sections where laurel is plentiful, one may cut it with pruning shears and use it sensibly in the manufacture of rope. Do not, however, cut or use too many of these greens until you have found a market for your greens.

Dairymen to Meet

Dr. H. B. Ellenberger, President of the New England Dairies, Inc., will talk on "The United Plan for Marketing Milk in New England," on November 29. The public is invited to attend this meeting of the Essex County Dairymen's Association to be held in the homemaking building of the Essex County Agricultural School. A banquet is scheduled for 6:45 P. M., to be followed by election of officers and directors of the Association. Dr. Ellenberger will speak at the close of the business meeting.

Modern Machinery Reduces Labor

One hundred and sixty-two separate farmers kept cost records from 1922 to 1929 in Wisconsin. It was found that the farms with milking machines required 130 hours of man labor per cow, yearly. This divided as follows: milking, 80 hours; care and feeding, 39 hours; care of utensils, 11 hours.

The farms without milking machines required 28 more total hours per cow yearly, divided as follows: milking 100 hours; care and feeding, 44 hours; care of utensils, 14 hours.

The difference of 28 hours is eight hours more than the time saved through the milking operation alone and was made possible because of the larger herds on the farms having milking machines.

—F. C. SMITH.

(Continued from page 1)

ston, Katherine Kolhonen, *Peabody*; Marion Cloutier, *Lynn*; Edith Cook, *Manchester*; Dorothy Cushman, Pauline Ramsey, *Haverhill*; Lillian Degenhardt, Cecile Lafonde, Thelma Ratcliffe, *North Andover*; Kathryn Ingoldsby, *Salem*; Priscilla Jacobs, *Swampscott*; Frances Pietrowska, Alena Bradford, Elaine Pingree, *Newburyport*; Phyllis Sim, *Saugus*.

Candidates for certificates in the Homemaking Department:

Margaret Beatty, Angela O'Leary, Rose Sacco, *Lawrence*; Marion Cloutier, Ruth Thomas, *Salisbury*; Mary Denny, Mary Kearns, *Peabody*; Rita Goddard, *Danvers*; Ruth Hall, *Andover*; Eileen Murphy, Elizabeth O'Brien, *Salem*; Isabella Shinner, *Methuen*; Eleanor Smith, *Topsfield*.

The Extension Service of Massachusetts State College at Amherst, issues, free of charge, two leaflets which contain many facts and suggestions on the use of lime. They are, "Liming Massachusetts Soils," leaflet 34; and "Lime for Vegetable Crops," leaflet 32.

What Poultry Litter Shall I Use?

By J. E. MERTMONE,
Poultry Instructor

When the fall and winter season brings short days, frequent rains, cold weather, and the closing of open fronts, the floors of poultry houses are often damp.

In Essex County, shavings are used most commonly for winter litter. Prices of this material are higher than those of nearly all other commodities. Woodworking plants are not on full schedule, but demand must be good for this by-product. When used alone, shavings have a bright, clean appearance, if they are frequently changed. They absorb a relatively small amount of moisture and are not wanted for soil building.

Oat straw is frequently used and is more economical than shavings because it has more volume. Bales weighing one hundred to one hundred and fifty pounds, costing one dollar to one dollar and a half, will furnish approximately twice as much litter as a bale of shavings and absorb much more moisture. Labor is saved because of less frequent changes. Oat straw is usually on sale in all communities and makes excellent plant food. Some poultrymen object to it because birds occasionally become crop-bound.

Peat moss has become a popular winter litter because it will absorb more moisture than any other material. In spring and summer it is too dusty. The price has dropped to a reasonable level, considering the volume and labor saved, due to less frequent cleaning. It is in demand in some sections for mulching and fertilizing.

Cocoa shells have been offered for sale in some markets, but are not available in all communities. They are dusty in dry weather, do not absorb large amounts of moisture, but make good plant food.

Peanut shells are being used by a limited number and have good and bad points similar to those of cocoa shells.

Oat hulls are rather new. Reports vary regarding their ability to absorb moisture. They are at present less expensive than shavings, but are not available in all places. These should make good fertilizer.

Enough litter should be used to prevent any part of the floor from becoming bare and caked with filth. Corns, hump-foot, and similar troubles may occur if sufficient litter is not used.

Litter should be removed before it becomes moldy or the odor of ammonia is noticeable.

Poultry Association Elects Officers

At a meeting of the Essex County Poultry Association held late in October at this School, the following officers were elected:

President, Albert E. Elwell, West Newbury; *Vice-President*, Robert Parkhurst, Boxford; *Secretary*, William R. Moore, West Peabody; *Treasurer*, Elery E. Metcalf, Saugus; *Executive Committee*, C. Nelson Hardy, Essex; J. Arthur Griffin, Danvers; Dimon Lockwood, Topsfield.

Bookshelf for the Farm Carpenter

The books and bulletins listed below have been recommended by Instructor F. R. Hardy of this School, as valuable for the farm carpenter or mechanic:

"Agricultural Woodworking," by Roehl. Bruce Publishing Company.

"Carpentry," by Griffith. Manual Arts Publishing Company.

"Operation and Care of Farm Machinery," John Deere Plow Company.

"Farm Blacksmithing," by Dew. Webb Publishing Company.

"Forge Practice," by Bacon. John Wiley and Sons.

"Farmers Shop Book," by Roehl. Bruce Publishing Company.

BULLETINS

"Rope and Its Uses," M. S. C. Extension Service, Amherst, Massachusetts.

"Small Single-cylinder Gas Engines," New York State College, Geneva, N. Y.

"Alpha Cement, How to Use It," Alpha Portland Cement Company, Easton, Pennsylvania.

"Farm Buildings," Southern Pines Association, New Orleans.

"The Farm Shop," Washington State College, Experiment Station, Pullman, Washington.

"Wood Preserving News," 111 West Washington Street, Chicago, Illinois.

Try Milk Mixed with Orange Juice

Research and experience at Wisconsin have shown that fresh milk is easier to digest if it is acidified by orange juice. The curd from milk thus acidified is much softer than when no acid is added.

On the average it is necessary to use one part orange juice to three parts milk. This has been used by physicians in the prevention of ulcers of the stomach.

—F. C. SMITH.

There have been sixty-six new 4-H Clubs formed this fall in Essex County.

Back Yard Poultry Flocks Made Profitable Through 4-H Club Work

Seventy-nine 4-H Club members enrolled in the 4-H poultry project last year, keeping an average of 32.5 birds apiece. This totalled an entrance of 2,571 birds in the Essex County 4-H egg-laying contest, from which the following figures were obtained:

The flocks of 79 club members produced 15,735 dozens of eggs, or an average of 74.7 eggs per bird for a period of seven months. These eggs were valued at \$5,756.43, and the cost of production was \$4,882.32, showing a profit of \$2,876.16, or an average profit of \$1.11 per bird for seven months (November 1 to June 1). The profit continued also through the summer months.

This is exceptionally high for last year's poultry profits, considering the low price of eggs.

—H. J. SHUTE.

(Continued from page 1, col. 2)

great wheel hubs, but upon studying conditions met by early builders the reason becomes clear. When we consider that steel in 1840 was uncommon and too expensive to be put into axles, and that country roads of that period were rough and rutty, we realize that wood hewn thick was wisely used. For safety, a large axle was centered on largely proportioned hubs. Today we use a small but extremely strong steel axle, which requires but a small hub. We may not claim credit for more wisdom, however, for it was the older generation who discovered the process of making cheaply produced steel.

The wagon is but one of three hundred pieces in the School's museum of farm antiquities. There is a wooden plow and a revolving hay-rake. A warping engine, or rope-making machine which has been studied and photographed by the United States Navy, is one of the rarer treasures. The "Byfield" stuffed hog, which lived and died in 1844, weighing at that time twelve hundred pounds, the only representative of an Essex County breed in existence, reposes in the collection.

Many of these are loaned by Essex County citizens. It is our hope that increasing numbers of people will visit the museum.

4-H Egg Laying Contest

The monthly 4-H egg laying contests are making the poultry projects extremely interesting. Club members have been eager to compare their production with that of others in the county.

They have reported each month by mailing a card to the club agent stating their numbers of birds and the

total number of eggs per month. These cards have been summarized and prize ribbons awarded to all the club members who have placed in one of the three classes.

The poultry project was conducted last year in Haverhill, Methuen, West Boxford, Newbury, Saugus, North Andover, and Essex. November is the month for starting the 1933 4-H egg laying contest. It is anticipated that more towns will be represented. "Learn to do the 4-H way. Get behind the club."

—H. J. SHUTE.

Round About the County

November 16—New Clothes From Old, Ipswich.

November 17—New Clothes From Old, East Haverhill.

November 18—New Clothes From Old, Newbury.

November 21—Annual Conference, Amherst.

November 22—Annual Conference, Amherst.

November 30—Upholstery, Ipswich.

December 2—Leader Training Group in Nutrition, Groveland.

December 7—Upholstery, Ipswich.

December 9—Family Finance (Miss Grace Gerard, Home Furnishing Specialist), West Boxford.

The remainder of December will be devoted to welfare organizations.

Nutrition—Our Money's Worth

The Leader Training Group under the direction of Miss May E. Foley, State Nutrition Specialist, held its second meeting on November 4, at the Congregational Church in Groveland.

Twenty-four women were present from the following communities:

Toppsfield (Mrs. George Dow, Mrs. Edward Miller, Mrs. Richard Ives); Georgetown (Mrs. Alfred Tidd, Mrs. Carrie Adams); Groveland (Mrs. W. A. Simpson, Mrs. Edward Moore); South Groveland (Mrs. Leander Maloney, Mrs. Frank Spofford); West Boxford (Mrs. Alexander Price, Mrs. Fred Whittier); Lawrence (Mrs. Richard Costello, Mrs. Katharine Dean); Methuen (Mrs. Harriett Hathaway, Mrs. Mary Poole); East Haverhill (Miss Edna Williams, Mrs. Robert Kinball, Mrs. Charles Batchelder, Mrs. U. L. Dow); Peabody (Mrs. Felix Carr, Mrs. J. Coyle); Rowley (Mrs. Robert Kinneer, Mrs. Mildred Hardy); West Newbury (Mrs. Horace Brown, Mrs. Carl Dodge).

The total number of women and children represented by these groups is 201 women and 299 children.

This group will hold its third meeting in Groveland at the Congregational Church on December 2.

Advisory Council—New Chairman & Vice-Chairman

The Advisory Council of the Women's Extension Department held the second meeting of the year on November 8, at the Essex County Agricultural School.

Mrs. Hazen K. Richardson of Middleton was elected Chairman of the Council, and Mrs. Bernard J. Manning of Amesbury, Vice-Chairman.

The Advisory Board is now composed of the following: Mrs. Hazen K. Richardson, Middleton, Chairman; Mrs. Bernard J. Manning, Amesbury, Vice-Chairman; Miss Marion Parker, Beverly, Secretary, and the following members: Mrs. Harold Peabody, Lynnfield Center; Mrs. William Wells, Marblehead; Mrs. E. Robert Little, Boxford; Mrs. Franklin Robblee, Salisbury; Mrs. Maidee Polleys, Essex; Mrs. George Mitchell, Groveland; Mrs. Fred Killam, Hamilton; Mrs. John W. Henderson, West Andover.

The date for the next meeting is January 10.

Low Cost Meals for Two Adults and Two Children

The following food order, according to May E. Foley, Nutrition Specialist, will furnish a well-balanced diet for a family of four for one week at a cost of between \$1.50 and \$2.00 per person.

The starred foods may be purchased in bulk at considerable savings.

Milk: 16 quarts milk; 5 tall cans (15 oz.) evaporated milk.

Meat and Meat Substitutes: 1½ dozen eggs; 1 lb. pork or beef liver; 1 lb. hamburger steak; 1 lb. stev meat; 2 cans pink salmon; *1 lb. dried beans; *½ lb. cheese.

Vegetables: 4 No. 2 cans tomatoes; 1 peck potatoes; 6 lbs. cabbage; 1 lb. onions; 3 lbs. carrots; 3 lbs. turnips or squash; 2 lbs. spinach.

Fruit: 4 oranges; 4 bananas (very ripe); 1 lb. prunes; 8 apples; 1 lb. raisins.

Cereals-Products: 12 small loaves bread (8 dark, 4 white); *3 lbs. oatmeal; *1 lb. cornmeal; *1 lb. rice or spaghetti; *1 lb. white flour; *1 lb. graham flour.

Fats: *1 lb. salt pork or cheap bacon; *1 lb. butter; *1 lb. lard or butter substitute.

Sweets: *3 lbs. sugar; *2 cups molasses.

Miscellaneous: *½ cup cocoa; *¾ lb. coffee; *½ lb. tea.

Note: There will be other miscellaneous supplies such as salt and other seasonings, which will not be necessary every week. You will need to make a small allowance for these.

ESSEX FARMER AND HOMEMAKER

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VOL. 13

NATHORNE, MASS., DECEMBER, 1932

NO. 12

Students Show Increasing Interest in Agricultural Science

The eighth annual Science Day was observed in agricultural hall on November 14, with Mr. E. B. Rideout, forecaster of weather conditions in New England, discussing the problems and interests which arise in the life of one who deals with the elements.

Immediately following Mr. Rideout's address, ribbons and medals were awarded to the following Science Day exhibitors:

First: Hyman Weinstein, Salem, for an exhibit of shrubs and evergreens; James Smith, North Andover, for soils and rocks, and an exhibit of diseased specimens of ornamentals with an analysis of their remedies; Francis Sparks, Andover, for a display of Woods; John Stepanchuk, Haverhill, for a collection of fungi.

Seconds: Fred Anderson, Beverly, for a feather exhibit; Lucille Lagasse, Haverhill, for an exhibit of ingredients for commercial fertilizer; Ralph Demuth, for a wood exhibit; Ernest Tarbox, Lynn, for leaves, weeds, and seeds.

Thirds: Arthur Bulgari, Byfield, for grains and hay grasses; Alfred Caproni, East Lynn, for a flower and shrub collection; Hartwell Daley, Salem, for a collection of seeds; Richard Colby, Haverhill, for weeds and seeds.

Honorable Mentions: Theron Johnson, Middleton; Alexander Dion, Salem; Walter Licht, Lawrence; Clinton Spencer, Ipswich.

First, second, and third Sweepstake Medals were awarded respectively to James Smith, Hyman Weinstein, and Francis Sparks.

Farmer's Day Discontinued for 1933

By vote of the Board of Trustees the annual Farmers' Day, which has usually been held on the second Wednesday in March, will be discontinued for the year 1933.

Essex County Beautiful

That individual trees are of singular beauty is undebatable when specimens of the sort pictured below are in question. This is only one of the many natural beauties found in Essex County. Rising to a height of sixty feet, it shades with its widespread branches an expansive knoll where



GREAT WHITE OAK IN FRONT OF J. A. CURTIS HOUSE IN MIDDLETON

ample space has been allowed for its full development. After standing for nearly three hundred and fifty years, it bears the character of enduring determination, with its rough, long limbs, gnarled and strong.

Virgil sang thus of the rugged Oak: "Full in the midst of his own strength he stands,

Stretching his brawny arms and leafy hands;

His shade protects the plains, his head the hill commands."

The beautiful red-purple of its leaves, assumed in the fall, seems to vie with surrounding bright hues. In winter it stands like a sentinel, armed against forces opposing.

One of the most interesting projects being carried out in Essex County is that of an association whose purpose it is to interest the public in protecting all landscape features which add to the county's beauty. Individuals and communities must work together in preserving such features as shrubs, trees, flowers, woodlands, and natural waters. Information on

(Continued on page 2, col. 3)

Prize Winners for 1932

On November twenty-second, at the Graduation exercises, Director F. A. Smith presented the following awards:

The R. S. Bauer Awards for Excellence in Agricultural Projects:

First—George Smith, Hamilton, \$20.00

Second—Walter Lewis, Andover, \$10.00

Third—Henry Richardson, Lawrence, \$10.00

Fourth—Arthur Peatman, Andover, \$5.00

Fifth—Fred Anderson, Beverly, \$5.00

The Mrs. R. S. Bauer Awards for Excellence in Homemaking Projects:

First—Rose Sacco, Lawrence, \$20.00

Second—Lillian Degenhardt, No. Andover, \$10.00

Third—Margaret Beatty, Lawrence, \$10.00

Fourth—Ruth Thomas, Salisbury, \$5.00

Fifth—Kathryn Ingoldsby, Salem, \$5.00

The Governor John Endecott Awards, given by William C. Endicott, For Superior Projects in Horticulture:

First—Leo Poisson, Andover, \$20.00

Second—Dora Winchester, Saugus, \$15.00

Third—Virginia Larrabee, Beverly, \$10.00

Fourth—William Costley, Lynn, \$5.00

Alumni Association Awards for Greatest Improvement in Academic Work:

Homemaking—Edith Cook, Manchester, \$5.00

Agricultural—Irving Day, Saugus, \$5.00

Abraham Krasker Medals for Excellence in English:

(Continued on page 3, col. 3)

Commencing with the next (January) issue, this paper, "The Essex Farmer and Homemaker," becomes a subscription publication. A subscription price of twenty-five cents per year has been fixed by the Board of Trustees. Your attention and support are invited.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION SUBSCRIPTION FREE

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CALENDAR

December 5—Small Fruit Evening Course at the School.
December 9—Topsfield Fair Meeting.
December 12—Small Fruit Evening Course at the School.
December 16 to January 3—Christmas recess.
December 19—Small Fruit Evening Course at the School.
December 28—Graduation Exercises of Short Unit Classes.
January 1-5—Boston Poultry Show.

Extension Services

It is essential, during a period of wavering incomes and conditions, that people of all classes guard these incomes with care.

The degree with which an income diminishes depends upon the caution or carelessness with which it is spent. There are material things which seem necessary to the state of physical and spiritual well-being of all of us. To distinguish between essentials and luxuries in both of these classes is a granted problem. Here we might let conscience be the supreme guide.

With the advice and instruction of educated leaders, who offer their services, there is small excuse for the alert man or woman to be ignorant in the ways of stretching the home dollar.

Periodic articles will appear in this publication announcing or summarizing what the State Extension workers advise for small income remedies. On page 4 of this issue is Miss May E. Foley's cure for large grocery bills, under "Our Money's Worth."

Essex County is to have two 4-H poultry judging teams at the Boston Poultry Show, the Junior team judging on January 3 and the Seniors on January 4. Boys will be chosen for their standing in club work as well as for their judging ability.

Alumni Notes

Leona Brown, member of the recent graduating class, is employed as household assistant at 81 Richardson Road, Belmont.

Lillian Degenhardt, '32, has a position as household assistant in Wenham.

Elaine Pingree, '32, is continuing her course of study at the Gorham Normal School, Gorham, Maine.

Word has been received that Mary Kearns, '32, will enter the Convalescent Home for Children at Wellesley, in March, to train.

Donald Williams, class of 1930, is working in the poultry department at Llewysac Lodge, Bedford, Mass. Working with him is a graduate of the Norfolk County Agricultural School, Richard Hewitt.

Henry Roberts, '29, was married in Brookfield on the twenty-third of November. His address is "Oakholm," Brookfield, Mass.

The address of Mrs. Reginald P. Clark, formerly Gladys Hulsman, class of 1924, is now 414 Broadway, Lynn, Massachusetts.

Honor Roll for Agricultural Department

Twenty-eight per cent of the agricultural students have attained distinction in averaging scholastic records of honor grade at the end of the first term. These students are:

David Carter, Elmer Flanders, *Rockport*; Nathan Clark, Elizabeth Crosby, *Swaampscott*; Alfred Cipolla, Dana Drew, James Gardella, Forrest Haynes, Franklin Day, John Stepanchuk, Fred Basile, *Haverhill*; Fred Anderson, Franklin Edwards, Joseph Desmond, Sidney Porter, Donald Henderson, Beverly; Hyman Weinstein, Hartwell Daley, Vincent Nelson, *Salem*; Robert Bolcome, Frank Cutting, *Gloucester*; Arthur Bulgarris, *Byfield*; Olim Donnelly, *West Newbury*; Malcolm Spalding, *Newbury*; John Kachadorian, Harold Theiling, *Methuen*; Arthur Peatman, John Lynch, Alfred Webb, John Peatman, Ruth Fairweather, *Andover*; James Smith, Allen Morse, *No. Andover*; Michael Pickowicz, *Billerica*; Joan Quinn, Ralph Broughton, Thomas Swiniarski, George Mosse, Robert Wolcott, Charles Randall, *Peabody*; George Sowyrda, *Wakefield*; Dora Winchester, Kenneth Nunan, Theodore Frieswyk, Albert Nunan, *Saugus*; Henry Richardson, Walter Dyleski, Gordon Morrison, Walter Licht, *Lawrence*; Kenneth Nolan, James Goodale, *Danvers*; Chester Ellis, Huntington Howard, Ernest Thayer, Donald Cooper, Leo Leonard, Andrew Murphy, Joseph Spakas, Daniel MacLean, *Lynn*; Alfred Caproni, *East Lynn*; Howard Stultz, Clinton Spencer, *Ipswich*; George Nelson, *Borford*; Lorin Clark, *Merrimac*.

News of the School at a Glance

November 22

A program sponsored by the High School Special girls, marked the observance of Thanksgiving Day in the Homemaking Department. Appropriate music and readings were rendered with thought and thankfulness.

December 14

A Christmas Assembly was sponsored by the Freshman girls in the homemaking department.

December 16

Future Farmers of America were the hosts at a joint assembly in agricultural hall, marking the close of the school session for Christmas holidays until January 3.

Officers of Alumni Association

Officers elected to the Alumni Association on the evening of this School's graduation exercises were: President, Robert Ewing, Brockton, class of '23; Vice-Presidents, Helen Lewis, Andover, '20; Llewellyn Jones, Haverhill, '29; Secretary-Treasurer, Horace J. Shute, Newbury, class of '27; Board of Directors, Clifford Sewall, Cliftondale; Edward Lynch, Wenham; Mrs. Elizabeth Playdon, Methuen.

Honor Roll For Homemaking Department

Following is a list of the girls whose names are found on the past term's honor roll in the homemaking department. Their average has been recorded as 85 or better. Starred are the names of those girls whose averages fell just below 85:

High School Specials—Marion Bell, *Methuen*; Marion Burkhardt, *Methuen*; *Clara Robinson, *Beverly*.

Seniors—Cora Ballard, *Middleton*; Bernice Ogden, *Newburyport*; Janice Wray, *Beverly*.

Juniors—Helen Ehrlick, *Methuen*; Mary Peterson, *Salem*; *Elizabeth McTague, *Nahant*.

Freshmen—Roberta Thompson, *Lynn*; Dorothy Thorn, *Saugus*; *Dorothy Lowe, *Lawrence*.

ESSEX COUNTY BEAUTIFUL

(Continued from page 1, col. 2)

the care and maintenance of landscape characteristics can be supplied through State and County sources. An interest in protection must be supplied primarily by individuals whose inborn love for beauty protests against destruction.

Essex County Dairymen's Officers

New officers for the Essex County Dairymen's Association were elected at the annual banquet and business meeting of the association held on November 29 at this School. Following are the names of officers and directors: President, Winthrop Gleason, Haverhill; Vice-President, Jane Shattuck, Topsfield; Secretary, Warren Blake, Peabody; Treasurer, Harley Tyler, Middleton. Directors: R. F. Messerli, No. Andover; Harvey Turner, Andover; Silas Little, Newbury.

A Key to Happy Family Living

V. L. CLARKE

"The American colonist of English stock was a home builder. . . . These sturdy Englishmen came, not as individual adventurers, but as families. If men came alone it was to prepare the way for wife and children."—Calhoun, "The American Family."

Thus our nation has been built on the solid foundation of homes and families, a matter of great economic importance and social concern. Because of the need for wholesome family life, a renewed interest in this subject has gained momentum within the last decade. Always there seem to have been too-large families, too-small families, the broken family caused by divorce or desertion, and the wealth-corrupted family. But they are in the minority. This is a fast-moving era and the family is struggling along with other institutions to keep pace. Society is just beginning to realize some of the problems that confront the modern family.

If you are truly interested in some of the problems of the home and family, one of the following is suggested: *Social Problems of the Family* by Groves; *Problems of the Family* by Goodsell; *Our Changing Morality* by Kirchwey; *Concerning Parents* by Gans; *Broken Homes* by Colcord; *The Drifting Home* by Groves; *Family Life Today* by Rich; *Modern Youth and Marriage* by Newman, and *The Family and Its Members* by Spencer.

If perchance the reader is the least inclined toward history, especially the colonial period, there is an abundance of material: *Social Life in Old Virginia* by Page; *Social Life in Old New England* by Crawford; *Customs and Fashions in Old New England* by Earle; *Home Life in Colonial Days*, Earle; *Men, Women and Manners in Colonial Times*, Fisher; *Social Life of Virginia in the Seventeenth Century*, Bruce; *Colonial Folkways*, Andrews, Vol. IX; *Women's Share in Primitive Culture*, Mason; *Women's Share in Social Culture*, Spencer.

Regional Agricultural Credit Corporation of Albany, New York

Application blanks for farm loans are now in the hands of County Agent F. C. Smith at this School. These blanks are made out by the Regional Agricultural Credit Corporation, a corporation formed to make loans and advances to farmers and stockmen for agricultural purposes and in connection with raising of livestock. Its principal offices are at 75 State St., Albany, New York. The territory includes the New England States, New York, and New Jersey. There is a branch office at Bangor, Maine.

The corporation was formed by the Reconstruction Finance Corporation to assist the farmer in taking care of his current indebtedness and crop production and marketing. Loans can be made only for agricultural purposes and for this reason they will not be based on real estate security. The rate of interest will not exceed the legal rate in each State.

Change in Milk Regulations

Attention is called to the fact that "Rules and Regulations" relative to testing milk and cream, where such tests are used as a basis of payment, were recently amended in order to give producers an opportunity to be informed of the test before samples were discarded.

The paragraph now reads:

"Composite samples of milk or cream, properly preserved and numbered for identification, must be kept in good condition for testing in all dairy plants for a period of at least five days after reporting the results of the tests in order to allow patrons the privilege of having retests made and to allow creamery inspectors to verify testing done by licensed Babcock test operators.

The official check tester in Essex County is John E. Eastwood, who can be reached at the Essex County Agricultural School, Hathorne.

Federal-State Certificates to Massachusetts Fruit Growers

More than five thousand barrels of Franklin County apples were recently inspected and certified for export to Europe. Arrangements for apple growers' official inspection at the shipping point were completed this fall through the cooperation of the United States Department of Agriculture. State inspectors are authorized by the federal department to issue federal-state certificates at all shipping points in Massachusetts.

Books for the Entomologist

For those interested in entomology, the following books and bulletins which treat of insects have been recommended by J. F. Gallant, Instructor of Science at this School:

Destructive and Useful Insects, by Metcalf and Flint; McGraw-Hill, Publishers.

Applied Entomology, by H. T. Fernald; McGraw-Hill, Publishers.

Bulletins:

Collection and Preservation of Insects, Farmers Bulletin No. 1601, Office of Publications, United States Department of Agriculture, Washington, D. C.

Control Calendar for Vegetable Pests, Extension Service, Massachusetts State College, Amherst, Mass.

Insects Injurious to Deciduous Shade Trees, Office of Publications, United States Department of Agriculture, Washington, D. C.

Diseases and Insects of Garden Vegetables, Office of Publications, United States Department of Agriculture, Washington, D. C.

Majestic Woods

*Majestic woods of cr'ry vigorous green,
Stage above stage, high waving o'er
the hills,
Or to the far horizon wide diffused,
A boundless, deep immensity of shade.*

One third of the total area of Essex County is in forests.

White pine comprises 28.2% of this area, or 30,993.4 acres.

The oaks: 27.3% or 29,972.9 acres. Miscellaneous hardwoods: 12.9% or 14,155.8 acres.

Maple and birch: 25.5% or 27,972.6 acres.

Pine and hardwoods: 6.1% or 6,813.2 acres.

Owners should avail themselves of the present surplus in labor to do pruning and partial cutting work in their forests. A small expenditure now will give gratifying financial returns later.

GEORGE A. MEIGS,
Instructor in Forestry.

PRIZE WINNERS FOR 1932

(Continued from page 1, col. 3)

Homemaking—Kathryn Ingoldshy, Salem.

Agricultural—Walter Lewis, Andover. In addition to winning the prizes mentioned above, Lillian Degenhardt and Walter Lewis both had their names placed on the Balfour plaque as representing students whose scholarship, loyalty, and achievement have been most marked during the past year.

Our Money's Worth

Twenty-two project leaders from Groveland, South Groveland, Georgetown, Topsfield, West Boxford, West Newbury, East Haverhill, Lawrence, Methuen, and Peabody met in December at the Congregational Church in Groveland for the third meeting under the leadership of Miss May E. Foley, State Nutrition Specialist.

After their final meeting, to be held Thursday, January 12, in the vestry of the West Boxford Congregational Church (10 A. M.), these leaders will carry back to their communities analyses of methods for getting one's money's worth. Low cost meals of nutritive value are the basis of Miss Foley's recommendations.

There are two hundred and thirty homemakers, mothers of nearly three hundred children, who will benefit by these meetings.

Leader groups are now forming in the eastern and southern parts of the county, the first meeting being scheduled for February 16 at the Hamilton Community House. It is requested that all communities interested send their applications to Mrs. Mary M. McIntyre, Acting Home Demonstration Agent.

When food money is very limited Miss Foley suggests that each week the amount of money to be spent for food should be set aside, allowing enough to buy a quart of milk daily for each child and a pint for each adult, dividing the remainder into equal parts as follows: 1 part for vegetables and fruits; 1 part for meat and meat substitutes; and 1 part for breads, all cereal products, fats, sugar and miscellaneous. (Under the last heading it is advisable to see that each person over two years old has at least one-third of a pound of butter weekly).

With eight dollars a week allotted to feed two children and two adults the expenditure would be:

\$2.10 for 21 quarts of milk.
\$1.97 for fruits and vegetables.
\$1.97 for meat and meat substitutes.
\$1.97 for breads, cereals, fats, sugar, etc.

\$8.01 Total.

F. F. A. Officers

To fill a vacancy left by the resignation of Robert Bartlett of Beverly, Fred Anderson, also of Beverly, was recently elected to the presidency of the Essex Chapter of the Future Farmers of America Association at this School. Alfred Cipolla of Haverhill was elected Vice-President.

Gold Medal to Danvers 4-H Member

Late in November, Esther Usher of Danvers was awarded a medal offered by the Kerr Glass Manufacturing Company in co-operation with the Extension Service, for a superior canning project.

For two years she has won first prizes in the Essex County Ball Jar contest; twice also, third prize in the State Ball Jar contest; and now, in 1932, a gold medal in the Kerr Glass Company contest.

Since 1928 she has canned 4152 jars of vegetables and fruits and has received \$96.50 in prizes. The value of her canned goods totals \$1,247.50.

Esther's 4-H record includes more than superiority in canning. She has had one year of clothing and garden projects and has been two years in food clubs.

In 1931 she was canning delegate to Camp Gilbert from Essex County, and won a State prize for the best improvement in health over a period of two years.

Massachusetts 4-H Poultry Judging Team Second in New York Contest

On November 26, the Massachusetts 4-H poultry judging team placed second, in New York, with 1965 points, falling not far below Connecticut's team whose 2060 points were well earned.

Individual prizes were awarded to two Massachusetts boys: Harold Fay, placing second, to whom a \$20.00 scholarship was awarded; and Howard Imer, placing fourth, who won a medal given by Poultry Tribune.

In addition to winning a large silver cup for placing its team second in the general contest, Massachusetts well deserved the honor it received in winning a cup for having the highest team score on White Leghorns.

Christmas Game for Children and Adults

Candle Steppers—Four stout men are chosen to run this race. In front of each are placed four tall red Christmas candles in a row. These candles are lighted and contestants are asked to step over the candles in their rows to get the measure of the necessary step. After they have practised they are blindfolded and told to start when the whistle blows. In the meantime, the candles have been removed. The "mental stepping" of the racers is amusing to watch.

Blanche Ilsley Delegate to National 4-H Congress

As one of the sixteen 4-H club members who represented the New England States at the National 4-H Club Congress, Miss Blanche Ilsley of Georgetown, arrived at the Union Station, Washington, on Saturday, November 26.

Until four o'clock the delegates drove around the city in a great sight-seeing bus, and visited many interesting buildings and shrines.

At Chicago, on the next day, these sixteen New England delegates made the acquaintance of nineteen hundred other members of the National 4-H Congress. Chicago, with centers of sciences, arts, agriculture, and the Adler Planetarium, was a magic city where magical things happened during the six days of convention. Amelia Earhart spoke to the delegates. Edgar Guest was the speaker at the National Rally and Banquet. 4-H members sang in a chorus at the opening of the Auditorium Theater which has been closed for fourteen years. Delegates were entertained by the Chicago Mail Order Company, Montgomery Ward Company, and The International Harvester Company.

Before leaving on Friday, December 2, the New England group formed the Chicago Congressional Society of New England, which is the first of its kind. Those who attend National Congress in the future will automatically become members, and will hold reunions each year in Boston.

This year has been the first that Essex County has had the privilege of sending a delegate to National Club Congress. Miss Ilsley, a club member for seven years and a local leader for three, is to be honored. In the State Dress Contest she was first prize winner in two classes, and placed second in the Home Economics contest at Brockton, thus winning a \$50 scholarship. Blanche is considered a shining example of what real 4-H Club work does for people, having come up through the ranks from a zero start to a county, state, and now a national winner.

Yuletide Delicacies

Stuffed Dates

1 package dates
½ banana
1 tablespoon juice (lemon)
Confectioner's sugar

Cream banana, add lemon juice, add sugar until mixture holds shape. Beat until smooth. This mixture may be used alone for stuffing dates or may be combined with nuts by putting a piece of nut in a date and filling with banana fondant.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 14

HATHORNE, MASS., JANUARY, 1933

NO. 1

Archer Lewis Pierce Awarded Certificate of Merit

For creditable accomplishments in fruit growing, Archer Lewis Pierce, one of the first students of this School, has been honored by the Massachusetts Department of Agriculture, and awarded a certificate of merit.

"For the past twelve years Mr. Pierce has been manager of the Brooksby Farm in Peabody. Gradually he transferred the farm from a dairy enterprise that was not meeting expenses, to a fruit farm that is showing a profit."

"Due to Mr. Pierce's early experiences as a farm boy and his later training at the County School, he not only succeeded in producing high quality fruit at minimum cost but also the ability to market the same to the credit of the farm. While many are finding markets glutted and prices low, Mr. Pierce has found new customers and novel ways of meeting unexpected situations."

"He has held important offices in the Grange, the County Agricultural Society, the Massachusetts Fruit Growers' Association, and other organizations. In fact Mr. Pierce has taken not only an active but an aggressive part in all matters that pertain to the betterment of agriculture and community life."

New Cow Tester

Hugh Smith, a graduate of the Stockbridge School at Amherst in 1932, has recently been appointed county cow tester to fill the vacancy left by Stanley Chlebowski. From the time of his graduation from Stockbridge School until his appointment as cow tester, Mr. Smith had been employed at the Grassland Farms in Concord, Massachusetts.

4-H Club and School Shine At Boston Poultry Show

Pictured below are the boys, and their Country Club leader, who won first place as a team, and individual honors at the Boston Poultry Show.



Alfred Cipolla

Wendell Stackpole

Bryce Ham C. C. Agent, H. J. Shute

Comprising the team were Wendell Stackpole, Bryce Ham, and Alfred Cipolla. A large silver cup is the temporary trophy symbolizing the honor which is theirs in winning first place. To retain the cup permanently Essex County must win it twice more in future contests.

Wendell Stackpole won the additional honor of placing first, individually, and Bryce Ham was fourth place winner. Each was awarded a cash prize.

Among the vocational students to judge was the School's team, made up of Thomas Swiniarski, Bryce Ham, and Ralph Broughton. This team likewise placed first, thereby winning a silver pitcher which is to be kept as a permanent recognition of their honor.

Thomas Swiniarski was awarded an electric sandwich toaster for placing first among the forty-eight individuals in the vocational group. Student Broughton was not far behind with third place.

Homemaking Department Giving Assistance to Welfare Departments

It has been the pleasant task of the homemaking students to provide the Lawrence City Mission and the Danvers Welfare Department with clothing for children between the ages of six and twelve years. Coats, donated by friends of the School, have been ripped, washed, pressed, cut over, lined and interlined by the students. Materials supplied by the Red Cross, both in Danvers and in Lawrence, have been made into dresses and warm underclothing for small children. All clothing work has been carried on under the supervision of Instructors Myrtle R. Dunn, Abbie L. Clapp, and Edith S. Morrill.

At Christmas time, candy made as a part of class work, was distributed in baskets made in the art department to the Beverly Community Center, Lawrence City Mission, the Carpenter Street Home in Salem, and to the Newburyport Welfare Department. Miss Emerson, head of the foods department reports that several girls made, and gave away candy to needy people, during their Christmas holidays.

In the toy unit of the Child Care program, Mrs. Mary Roundy, R. N., has supervised the making and renovation of toys which have been distributed throughout sixteen communities in Essex County and in one case to a town in Maine. Small chairs and kiddy cars have been re-painted. Scrap books of fantastic designs which would delight any child were made, and the menagerie of stuffed animals which were fabricated by the girls would have made a zoo keeper look twice to see whether they were real—or just looked real!

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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Calendar

January 20—Norfolk Basketball Game at Norfolk.
January 25—Joint Assembly—Reverend Garfield Morgan, Speaker.
January 27—Bristol Basketball Game at Bristol School.
January 27—Closing of the School's second term.
February 9 and 10—Local Public Speaking Contest at the School.
February 10—Junior Prom and Norfolk Basketball at the School.
February 11—Boston Market Gardeners' Association Meeting here.
February 15—Baby Chick Show Sponsored by the Poultry Association.
February 17—Stockbridge Basketball Game here.
February 21—Marblehead Basketball at Marblehead.
February 24—Norfolk, Bristol, Essex Public Speaking Contest at this School.
February 24—Week's recess for homemaking students.

Welfare

In December the Extension Department, under Mrs. Mary McIntire, Acting Home Demonstration Agent, sponsored classes in clothing to assist welfare departments in several towns of the county.

Public Speaking Contest

On February 9 and 10, students in the agricultural department who have signed up to enter the public speaking contest sponsored by the Future Farmers of America Association will compete in a local School elimination contest, the winners of which will be intensively trained to enter the county contest on February 24.

The competitors have chosen subjects of agricultural value for their compositions which will no doubt be of an appropriate nature at this time.

Marriages

Paul Lovell, of Cliftondale, to Emily Bailey, Cliftondale, class of 1931, on July 3, 1932. Announcement was made on October 23, 1932.

Ivan Elliot Kent to Lucinda Bousley, class of 1916, on Sunday, the sixteenth of October, 1932.

William Pheil to Norma Nickett, class of 1929. They are living at 22 Sherman Ave., Cedar Grove, New Jersey.

Andrew Baillie, 6 Carisbrooke St., Andover, class of 1928, and Mary Emma Knapp of Andover, at Grace Church, Lawrence, January 2, 1933.

Basketball Schedule

The boys' basketball team is scheduled to play the following teams this season:

January 10, at Marblehead; January 13, Alumni; January 18, at Salem Normal; January 20, at Norfolk County Agricultural School; January 27, at Bristol County Agricultural School; February 1, at Peabody; February Peabody; February 8, at Salem Normal; February 10, Norfolk County Agricultural School; February 17, Stockbridge; February 21, Marblehead; March 3, Bristol County Agricultural School. Unless otherwise designated, the games will be played at the School gymnasium.

Coach Couhig announces that Alfred Webb of Andover has been elected manager of the team.

Market Gardeners At The School

The Boston Market Gardeners' Association will hold their customary meeting at the School on Saturday, February 11. This is usually a largely attended meeting and is especially gratifying to the local members of the Association who come out usually in full force. In past years many women have attended this meeting. The School is very desirous of cooperating with the local members to make this an outstanding event.

Vegetable Judging at Worcester Agricultural Meeting

The final vegetable judging contest of the year was held recently at the annual Worcester Agricultural Meeting.

This year is the first to find vegetable judges competing at this meeting. All boys participating were chosen for having placed previously among the first ten in contests, at the County Fairs and State Contest at Amherst. Vocational and 4-H boys judged together.

Representing the School were Ralph Broughton, Forrest Haynes, Jack Wong, and Frank Cutting. Students Broughton and Haynes placed fifth and tenth respectively, competing with twenty-five contestants.

Proctor Houle of Newbury placed second for the 4-H members.

Japanese Beetle Arrives

As a result of studies made by the United States Department of Agriculture last year in this county Japanese beetles were found at Lynn, Salem, Lawrence, and several other points. This, together with the general distribution of the insect over southern New England has caused a quarantine to be extended over Massachusetts, Rhode Island, Connecticut, Vermont, and New Hampshire except for Coos County.

This means that nursery stock, florists stocks, fruits, flowers, and vegetables may be transported and sold within the area under certain regulations. Plant materials which are to be sent outside of this area have to go through a proper inspection and certification.

This insect has been very prevalent in New Jersey and adjacent parts of Pennsylvania and New York State and now it seems to be spreading northward and eastward.

The control of this beetle is interesting. In the mature or beetle stage, which occurs in late June, July, and August, it offers the best opportunity for control. It responds rather well to the usual strength spray of arsenate of lead. The insect has a wide feeding range. Some methods for control of the larvae stage, which occurs in the ground and during which the larvae eats grass and herbaceous plant roots, are more difficult and not so practical of application.

Commercial growers and others who need to ship plant material outside the quarantine area should apply to the United States Department of Agriculture, 12 South Market Street, Boston, for the necessary advice and permits. Federal agents are covering the area as rapidly as possible.

Baby Chick Show

The Essex County Poultry Association announces a baby chick show scheduled for Wednesday, February 15, Grange Hall, West Andover.

Any poultryman in Essex County may enter a group of twenty-five day old chix. The show is not confined to members.

For information regarding application blanks apply to the Secretary of the Essex County Poultrymen's Association, William B. Moore, West Peabody.

The public is invited to visit the exhibit in the evening, for which no admission fee is charged.

Some Suggestions For Growers of Small Fruits

In a series of lectures sponsored by the Extension Department and held recently at this School, small fruit growing, fruit diseases, and their control were discussed by fruit specialists.

At the first meeting Director Fred A. Smith described and exhibited varieties of cultivated blueberries grown in the School nursery for the first time in Essex County last summer. The maximum size of single berries was six eighths of an inch in diameter. The quality of the berries has been commented on by many as being very fine.

W. H. Thies, Extension Pomologist, speaking also at the first meeting, discussed the best methods of growing strawberries, red raspberries, and grapes. He recommended Howard 17 as an all around, reliable strawberry, and advised using Extension Leaflet No. 29 as the most satisfactory bulletin.

THE CUTHBERT

is a widely planted raspberry but susceptible to mosaic. Extension Leaflet No. 48 on "Growing Raspberries" describes other varieties, including Herbert, Latham, the Viking, and Newman. Concord, Delawares and the Fredonia are varieties of grapes advised for use by Professor Thies. Extension Leaflet No. 64 on "Grape Growing in Massachusetts" will help those interested.

At the second meeting, Dr. O. C. Boyd of the State College, enumerated different fruit diseases, among which are: strawberry leaf spot; raspberry mosaic, crown gall, cane blight and anthracnose; and grape black rot, mildew, and anthracnose.

Professor O. C. Roberts of the Massachusetts State College brought the course to a close with an illustrated discussion of insect pests and their control. The bulletins mentioned above will cover quite thoroughly Professor Roberts' material, and are obtainable through the County Agent, F. C. Smith, who was responsible for

having the small fruit course in Essex County.

John Chadwick of Boxford has had excellent results with squashes by seeding and harvesting them late and letting them lie five days in the field before storing. By putting them on racks near stove heat (and he finds that a wood fire is better than coal), he dries them out quickly with the result that there has been no rot to speak of.

Of Interest to Dairymen

Of major importance to dairymen are the regulations for the inspection of dairy farms producing milk for distribution, sale, or exchange in the Commonwealth, as established by the Milk Regulation Board under the Provisions of Chapter 305, Acts of 1932.

Purchasers of milk who are interested in safety from diseases known to be spread by milk should be acquainted with these regulations, as well as dealers and producers.

Kindness To Birds

Packages of cracked corn and small seeds suitable for wild birds, sent parcel post to "Mr. and Mrs. Bird, care rural carrier," will be scattered along the postman's route to prevent starvation among the birds during severe winter weather. It is through the efforts of the National Audubon Society that authority has been given by the Federal Post Office Department for mail carriers to transmit this service to the birds.

Organizations and individuals interested in birds are requested by Dr. John B. May, Director of Ornithology, State Department of Agriculture, to be prepared to send their feeds before the next snowfall to the address specified above: "Mr. and Mrs. Bird, care rural carrier."

Books On Farm Crops

The following list of books and bulletins which deal with crops is recommended by G. A. Cooley, Instructor in Farm Crops at this School:

"Productive Farm Crops", by Montgomery; Lippincott, Publishers

"Field Crop Enterprises", by Davis; Lippincott

"Forage and Fiber Crops in America", by Hunt; Orange-Judd Company

"The Potato", by Stuart; Lippincott

"Forage Plants and Their Culture", by Piper; Macmillan Company

"Crop Production and Soil Management", by Cox; Wiley Company

BULLETINS

Farmers Bulletin No. 1283: "How to Grow Alfalfa"

Farmers Bulletin No. 1339: "Red Clover Culture"

Farmers Bulletin No. 1064: "Production of Late or Main Crop Potatoes"

Farmers Bulletin No. 1562: "Farm Practices Under Corn Borer Conditions"

Farmers Bulletin No. 660: "Weeds and How to Control Them"

Address Office of Publication, Washington, D. C. for any of the bulletins listed above.

Farm Account Schools

Plans are being completed for a few Farm Account Schools to be held probably during March. Some claim that after having started records it takes but two minutes a day to keep them, yet it gives one a clear grasp of his farm business. Such records aid in making wise decisions. And wise decisions determine whether Johnnie shall go to college or whether Mary shall have that new dress.

Those interested should get in touch with the County Agent.

F. C. Smith

WEATHER SUMMARY

September Through December 1932

	Sept.	Oct.	Nov.	Dec.	Year
Maximum Temperature	88	80	64	64	91
Minimum Temperature	36	27	7	-8	-8
Mean Daily Temperature	62.2	53.5	39.6	33.8	49.2
5-Year Average ('27-'31)	62.4	52.1	42.9	31.1	48.6
Greatest Daily Range	37	32	35	32	46
Least Daily Range	3	2	3	6	2
Precipitation	5.77"	7.64"	5.40"	1.76"	46.33"
5-Year Average ('27-'31)	2.67"	3.20"	2.74"	3.74"	38.56"
Excess for Year					+7.77"
Average Relative Humidity, 8 A. M. ..	81.6%	84.7%	69.5%	72.7%	73.1%
Number Days Rain Fell	7	9	9	10	106
Clear Days	16	12	15	13	158
Partly Cloudy Days	7	8	7	7	104
Cloudy Days	7	11	8	11	104
Total Hours Sunshine	230.5	163.0	175.0	140.5	2489
Percent Sunshine	61.5%	47.6%	59.5%	49.6%	55.8%
Snow Fall				9.5"	37.5"
First Heavy Frost	October 14				
Last Killing Frost	June 8				

School Wins Fruit Judging Honors at Worcester Convention

At the recent agricultural convention held annually at Worcester, representatives of this School ranked high in fruit judging. Thomas Swinarski, John Kachadorian, and Fred Basile are very deserving of the honor which is theirs in making up a winning team which placed first in competition with six other teams. Individual scoring placed Students Swinarski and Kachadorian near the top: fourth and fifth respectively.

Not least of the honors was won by Student Kachadorian when he was awarded a sixty dollar scholarship offered by the Massachusetts Fruit Growers Association for the furtherance of an agricultural education. The competition was keen, all three competitors being well qualified with judging experience, superior projects and project records. It was by a well-earned margin that Student Kachadorian won the scholarship. Of especial interest is the fact that in the past two years this student has won five first prizes, one second, and a fifth, in addition to the scholarship, for excellence in fruit judging.

Our Money's Worth

The first of a series of leaders' meetings in a nutrition project will be held at the Hamilton Community House on February 14. Three meetings on March 14, April 4 and May 2 will complete the course which is to be conducted by Miss May E. Foley, State Nutrition Specialist.

Twenty-six leaders in the northern part of the county recently had an attendance of three hundred and eleven women for this project, entitled Our Money's Worth.

Practical questions concerning food values are answered at each meeting and advice in buying nutritious foods at the lowest cost is given.

Community Activities

"Have you ever stopped to consider what you and your neighbors are doing to prevent the lives of the children in your community from being stunted by lack of appreciation of their beautiful surroundings and by lack of appreciation of their beautiful birds, flowers, music and art?"

The whole outcome of a project often hangs on the enthusiasm and energy which a single individual puts into it.

"Have you ever stopped to sum up what your young people are doing in their leisure time? What are the boys and girls doing for their Recreation?"

These are some of the questions asked by Miss Mary Pozzi, Assistant Specialist in Home Economics at Amherst. Her advice to parents is that they instigate a desire in children to participate in community recreation. Centers for such recreation have been provided in one way or another in

many large and small cities and towns.

"Let the young people express themselves on 'Why we need some place in which to gather for our social life.'"

Meeting of Women's Advisory Council

The following members of the women's advisory council were present at the January meeting: Mrs. Hazen K. Richardson, Middleton; Mrs. Franklin Robblee, Salisbury; Mrs. George Mitchell, Groveland; Mrs. John W. Henderson, W. Andover; Mrs. E. Robert Little, Boxford; Mrs. Bernard J. Manning, Amesbury; and Miss Verna Payson, of the State Department of Education.

Guest speakers at the meeting were County Agent F. C. Smith who discussed "Organization"; and Mrs. Felix Carr who described the handling of welfare work in Peabody, Massachusetts.

Spring classes in Home Nursing, conducted by Mrs. Mary Roundy, R. N., of the School Extension Staff, will start in April at Lawrence, Amesbury, and West Gloucester.

New Clothes From Old

Classes in remodelling adults and children's clothing are now being carried on in Newburyport, Middleton and Groveland. The women find these classes useful in cutting their clothing expenses and bringing their wardrobes up to date.

Rabbit Breeders Elect Officers

At the annual business meeting of the Essex County Rabbit Breeders' Association held January 19, the following officers were elected: President: Daniel R. Pinkham, Lynn; Vice President: James Collins, Swampscott; Secretary: Charles Livesley, Ipswich; Treasurer: Ned Harris, Ipswich; Executive Committee: Samuel Rice, Saugus; William Ames, Lynn; Herman Jung, Peabody; Assistant Secretary, Deborah Younger, Lynn.

"If there be a saving way, at all, it is obviously this: Substitute health and happiness for wealth as a world ideal; and translate that new ideal into action by education from babyhood up."

John Galsworthy.

4-H Poultry Clubs Competing for Banner

To the 4-H poultry club averaging the greatest egg production, a banner is being awarded each month, and to the individual doing the best poultry work for the year a silver loving cup is offered by the H. K. Webster Company. The club winning the banner the greatest number of times will retain it permanently at the end of the year.

It is very important that every club member send in a report of his birds each month. The score is based on the average egg production for the club, and failure of members to report will seriously reduce the club average.

In November the banner went to the Methuen poultry club, the average egg production being 8.7 eggs per bird. The Live Wire Poultry Club of Haverhill averaged 13.4 eggs per bird in December thus winning the banner for that month.

The 4-H egg production contest this year is to be run like that of last year. Awards will be given to those club members whose birds have egg production falling in classes which will be specified. In November blue ribbons were awarded to the following, for averaging sixteen eggs per bird, or over: Theodore King, John Makrogious, Tony Moskal, Albert Davis, Sidney Chadwick, all of Haverhill; Leo Roy, Salisbury; Rene Deloge, N. Andover; Ernest Law, Methuen. Red ribbons were awarded to the following, for averaging fourteen to sixteen eggs per bird: Bryce Ham, Kenneth Tilton, John Taylor, Bennie Chapinski, Peter Chapinski, all of Haverhill. The following were awarded yellow ribbons for averaging ten to fourteen eggs: Bayard Winter, Winthrop; Nathan Gardner, Winthrop; Frank DeLuca, Melvin Thornton, Alger Ramaika, Arthur Yemma, Alvin Duff, Maurice Legare, all of Haverhill.

Prize winners for December were: Blue ribbons (18 eggs per bird, or over): John Makrogious, Edward Sirski, John Sirski, Sidney Chadwick, John McCarthy, Tony Moskal, Theodore King, Bryce Ham, all of Haverhill; Ernest Law, Methuen. Red ribbons (13 to 18 eggs per bird): Nathan Gordon, Winthrop; Rene Deloge, N. Andover; Frank DeLuca, Peabody; Kenneth Tilton, John Taylor, Arthur Yemma, Merle MacDonald, Arthur Spohr, all of Haverhill. Yellow ribbons (11 to 13 eggs per bird): Robert Sykes, Methuen; Edward Mears, Essex; Bayard Winter, Winthrop; Mitchell Heider, Edward Heider, William Cranton, Peter Chapinski, Bennie Chapinski, Maurice Legare, all of Haverhill.

H. J. Shute,
Country Club Leader.

ESSEX FARMER AND HOME MAKER

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HATHORNE, MASS., FEBRUARY, 1933

NO. 2

Speedsters?

The last twenty or twenty-five years have shown some marked changes in automobile performance. But then, a car is not a living thing but a creation of inanimate materials only. Let us consider for a moment the increased demands from the hen, a creature of flesh and blood, over a similar period.

In egg laying contests the leading pen average has jumped from two hundred eggs per bird to three hundred eggs.

A bird must begin to lay at five to seven months of age as against eight to ten months.

Her maximum growth is reached at ten months but she must lay heavily while she is still growing.

She would normally start off with eggs weighing an ounce, but we expect two ounce eggs after she gets into production.

Thirty eggs by March 1st was once satisfactory, but now a good pullet is expected to produce one hundred in that period.

A twelve hour day was once considered ample, but some poultrymen now use all-night lights.

In some cases she never steps out of doors from the time she is hatched, and spends her entire life in cages 17" to 30" square.

The hatchability of her eggs, the livability of her chix, her annual production and the rate of growth of her sons and daughters have all stepped up 30% in twenty years.

Why, we ask, is the eagle on our silver dollars?

J. Stanley Bennett

Athletic Banquet and Dance

On Friday, February 17, a dance was held for the benefit of the athletic banquet and dance which is scheduled for March 15.

Members of the Alumni Association are working with the Future Farmers of America Association athletic committee to make the dance and banquet as brilliant a success as last year's.

To you alumni and friends of the school who don't want to miss a good time, the banquet hour is 5:30 P. M. in the homemaking building, and the dance will start at 8:30 in agricultural hall.

Remember the Date:
Wednesday, March 15.

Noted Authority To Speak at This School

Professor Walter B. Krueck, a graduate of the University of Wisconsin, will speak at a meeting for poultrymen on Tuesday, February 21, at 2 P. M. in Agricultural Hall of this School. At 8 P. M. he will discuss, with dairymen, means of reducing the cost of feeding during these times.



WALTER B. KRUECK

Professor Krueck has taught and done Extension work at Purdue University; was, for three years, County Agricultural Agent in Tippecanoe County, Indiana; and has had experience in operating and managing large stock farms. It is with this background that he comes to Essex County with suggestions for poultrymen and dairymen.

The meetings are open to the public.

Vegetable Gardens For 1933

By C. M. Stearns

Instructor in Vegetable Gardening

Much interest was shown this past season in community and back yard gardens. Can we not take a lesson from this past experience and prepare now for more fresh vegetables which are needed in our diet this coming season?

If we were not fortunate enough to have the ground plowed up last fall we should attend to it the first thing this Spring, and particularly so if the ground is into sod. Plow as deep as you can without turning up the sub soil or lighter colored soil. Then give the ground a good disc harrowing or cutting so as to facilitate the care of crops later. Use plenty of fertilizer, 175 pounds of a 5-8-7 fertilizer to the average house lot of 50' by 100'. This is at the rate of 1500 pounds per acre basis. The fertilizer, as a rule, should be applied before the crop is planted. Careful mixing of the fertilizer into the surface soil should be practiced before seed is sown to prevent burning damage to the rootlets of the little seedlings.

So plan your garden that it will produce plenty of vegetables during the season as well as for storage next winter. The average garden should have these vegetables: cabbage, beets for both greens and roots, carrots, beans, corn, tomatoes, and possibly potatoes and turnips. With potatoes as cheap as they have been this winter it might be wise to buy them at the store and grow some of the other vegetables in their place. However, if you plant potatoes, buy certified seed of either the Irish Cobbler or Green Mountain varieties. The amounts of vegetables to be planted will vary according to the size of your family and your likes and dislikes.

Golden Acre cabbage is a good early variety and Penn State Ball Head a late; Crosby Sgyptian, early, and Detroit Dark Red, late beet varieties; Chantenay, early, and Danvers Half Long, late carrots; Golden Bantam or Sunshine as corn varieties; Bountiful as green bush beans, Sure Crop as yellow bush, and Kentucky Wonder as pole beans; Bonny Best, early, and Stone, late tomatoes; Purple Top Milan and Purple Top Strap Leaf are good varieties of turnip.

If you have any problems relative to planning your garden let the vegetable department at the School aid you.

NINETEENTH
ANNUAL
FARMERS AND
HOMEMAKERS DAY
WEDNESDAY
MARCH 22

1933

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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President, Thomas Smith Methuen
Secretary, Stephen Dyer Lawrence

Eastern Massachusetts Society of Beekeepers

President, George A. Meigs Hathorne
Secretary, Earl B. Pride East Lynn

Calendar

February 23—Family Finance meeting at Beverly Public Library, under the auspices of the Women's Extension Service of the School.

February 24—Norfolk-Bristol-Essex Public Speaking Contest at this School.

February 24—March 6—Homemaking recess.

February 28—Future Farmers of America meeting, with R. O. Small of the State Department of Education as guest speaker.

March 7—Local Market Gardeners Meeting.

March 10—State Public Speaking Contest at Hopkins Academy, Hadley, Massachusetts.

March 22 (Wednesday) Annual Farmers and Homemakers Day.

Farmers and Homemakers Day

The Trustees have decided to continue the Annual Farmers and Homemakers Day and have placed its management and organization in the hands of a special committee.

The committee is composed of Melville G. Grey, Chairman, Edmund M. Bartlett, Robert A. Lee, J. Warren Chadwick, George C. Thurlow, and Fred A. Smith. The committee has already decided upon Wednesday, March 22nd and are now using every means to offer a complete, valuable program built around a large trade exhibit.

Honor Roll

Agricultural Department

The Educational Manager has announced that 28.1% of the student body have placed on the second term honor roll. Starred names signify students who have placed on both the first and second term honor rolls:

Seniors: David Carter*, Robert Bolcome*, Elmer Flanders*, all of Rockport; Hyman Weinstein*, Salem; Fred Anderson*, Robert Bartlett, Beverly; Nathan Clark*, Swampscott; George Sowyrda*, Wakefield; Alfred Cipolla*, Haverhill; Thomas Mahoney, Danvers; Arthur Bulgaris*, Byfield; Lester Dixon, Andover; Olin Donnelly*, W. Newbury; Paul Fisher, Lynn; Michael Pickorvicz*, Billerica; John Quinn*, Peabody; Malcolm Spalding*, Newbury; Jack Wong, Salem.

Juniors: Ralph Broughton*, George Mosse, Peabody; Dora Winchester*, Albert Nunan*, Kenneth Nunan*, Saugus; John Lynch*, Alfred Webb*, Andover; Frank Cutting*, Gloucester; Franklin Edwards*, Joseph Desmond*, Sidney Portetr*, Beverly; Henry Richardson*, Lawrence; Thomas Swinarski*, W. Peabody; Dana Drew*, Fred Basile*, Haverhill; Kenneth Nolan*, Danvers; Chester Ellis*, Alfred Caproni*, Walter Dempsey, Lynn; Howard Stultz*, Ipswich; James Smith*, N. Andover; Edward Brown, Swampscott; Alexander Dion, Salem.

Sophomores: Walter Licht*, Lawrence; Philip Hamson, Henry Cooper, Lynn; Forrest Haynes*, Gilbert Wallace, Haverhill; Donald Henderson*, Beverly; Rene DeLoge, N. Andover; John Monroe, Andover.

2X-Y Group: Ruth Fairweather*, Raymond Ouellette, Andover; Ernest Thayer*, Lynn; Elizabeth Crosby*, Swampscott; Hartwell Daley*, Vincent Nelson*, Salem; George Nelson*, Haverhill; Victor Pohju, Peabody; Richard Lavin, Frank Pelczar, Lawrence; Allen Morse*, N. Andover.

Freshmen: Clinton Spencer*, Ipswich; John Stepanchuk*, Haverhill; Chester Buczek, Salem.

Alumni Notes

Harold Henderson, West Roxbury, class of 1920, is in the nursery business with Richard Knight.

Mildred Russell, class of 1928, is now living at 3 Pleasant Ave., Danvers. Announcement of her engagement to Bernard Collins, Nursery St., Salem, was recently made.

Alice Pickles, class of 1930, is employed at the Thatched Roof Tea Room, North Andover.

Word has been received that Claire Mae Henderson was born on September 2, 1932. Claire Mae is the daughter of Mr. and Mrs. Harold Henderson, West Roxbury.

A daughter, Lorraine Doris, was born on October 29, 1932 to the wife of Harold Wilson, class of 1924.

Elmer Shattuck, class of 1924, is living in South Danville, N. H., and retailing vegetables in Haverhill and North Lawrence, from his own nine acre farm.

News of the School at a Glance

February 3

The first of a series of textile films being shown weekly in the homemaking department, pictured the process of manufacturing silk, from the period of raising the silk worm to winding the spools.

February 9

The local public speaking contest held annually as a feature of the Future Farmers of America Association, embraced many topics directly pertaining to prevailing agricultural conditions. "Farm Life" was discussed by Theron Johnson of Middleton; "A New Deal for Market Gardeners" by Hyman Weinstein of Salem; "The Present Agricultural Situation," by John Shanahan, Lynn; "The Voluntary Domestic Allotment Plan" by Ernest Thayer of Lynn; and "Are Farmers Justly Taxed?" by Clarence Patterson, Peabody.

February 10

Final speeches in the local public speaking contest included "The Negative View of the Voluntary Domestic Allotment Plan," by Alfred Cipolla, Haverhill; "Back to the Soil," by George Mosse, Peabody; "The Insect Menace," by E. Hartwell Daley, Salem; and "Gleanings From Roadside Markets," by Virginia Larrabee of Beverly. The following students were claimed by the judges as winners in the order listed: (1st) Clarence Patterson; (2nd) Ernest Thayer; (3rd) E. Hartwell Daley; (4th) Virginia Larrabee; (5th) Theron Johnson. The first three will compete in the County Contest to be held at this School on Friday, February 24.

Honor Roll

Homemaking Department

Of the 104 students in the Homemaking Department, twenty-two were announced for the second term honor roll by the department head:

Seniors: Cora Ballard, Middleton; Bernice Ogden, Newburyport; Dorothy Williams*, Lynn.

High School Specials: Elizabeth Akerley*, Beverly; Marion Bell, Methuen; Marion Burkhardt, Methuen; Thelma Healey, Lynn; Frances MacDonald, Gloucester; Fay McGrath, Newburyport; Clara Robinson, Beverly; Mary Ryan, Nahant; Frances Whitely, Andover; Helen Wood, Swampscott; Wilma Corliss*, Marblehead.

Juniors: Irene Burbeck*, Salem; Helen Ehrlick, Methuen; Elizabeth McTague, Nahant; Mary Peterson, Salem.

Freshmen: Dorothy Lowe, Lawrence; Roberta Thompson, Lynn; Dorothy Thorn, Saugus; Genevieve Pasquale*, Lynn.

Starred names signify honorable mention, denoting an "84 plus" average.

County-Wide Meetings For Special Groups of Farmers

A series of group agricultural meetings are being held throughout the county this year.

At the fruit meetings, already held, Professor W. H. Thies of the Massachusetts State College, stressed the need of thorough spraying for producing clean fruit. Of the spraying equipment pictured by him, he seemed to favor, for the large grower, what is known as the quad-sprayer, a four-nozzle arrangement which, with care, covers the leaves thoroughly and quickly. Three unique and useful pieces of equipment shown in his pictures included a horizontal boom, a six-nozzle gun mounted on a swivel, and a small stationary outfit from which lines of pipe run out into the orchard. All three types are usually chosen to fit the particular needs of individual owners.

Instructor C. M. Wood of the School, contributed a spraying program which he followed at the School in 1932. This consisted of:

No dormant spray
Pre-pink spray, May 3
Pink spray, May 12
Calyx spray, May 25
First cover spray, June 6
Second cover spray, June 20
Maggot spray, July 18

Because of the quantities and prevalence of maggot flies, it is his intention to make two maggot sprays instead of one, in 1933: the first in early, and the second in late July. Sidney Porter*, Beverly; Henry Rich-

Ten to one the bushes already are crowding in on some of the swales and best land in the pasture. Now is a good time to get rid of them. Next spring 200 or 300 pounds to the acre of double strength potato fertilizer (8-16-14) or, a few dollars worth of slag and hen manure if you have it, will "shoot up" the grass on these spots to make real grazing for your cows. And you will be surprised how the cows will enjoy it and will help to control new brush growth.

Others have found that it works. Let's see if it does!

Ralph W. Donaldson,

Nutritive Meals At Low Cost

With an interest in reducing the weekly grocery bill to a minimum, Instructor Ruth Emerson of the Homemaking Department has tutored her students in planning low cost meals of nutritive value. The recipes which follow were prepared by Student Bernice Ogden of Newburyport and can be purchased for a family of 2 adults and 3 children at \$7.67.

SUNDAY

Breakfast: Oranges, beans, mustard pickle, toast, coffee, cocoa.

Dinner: Hamburg balls with tomato sauce, turnip, mashed potatoes, rice pudding, tea.

Supper: Egg sandwiches, milk, tea, rice pudding (left over).

MONDAY

Breakfast: Prunes, cream of wheat, toast, coffee, milk.

Dinner: Beef stew with vegetables, tea, orange custard.

Supper: Cheese rarebit, toast, milk, peaches.

TUESDAY

Breakfast: Bananas, oatmeal, muffins, coffee, milk.

Dinner: Scalloped tomato and cheese, spinach, apple dumplings and lemon sauce.

Supper: Corn fritters with molasses, cole slaw, oatmeal cookies, milk.

WEDNESDAY

Breakfast: Oatmeal and raisins, toast, milk.

Dinner: Creamed dried beef, baked potatoes, carrots, coffee jello.

Supper: Vegetable salad (beets, carrots, peas), dark bread, bread pudding.

THURSDAY

Breakfast: Applesauce, corn meal mush, toast, milk.

Dinner: Split pea soup, Johnny cake, fruit salad (bananas, peaches, oranges) tea.

Supper: Creamed dried beef (left over), toast, gingerbread, milk.

FRIDAY

Breakfast: Cream of wheat, toast, jelly, coffee, milk.

Dinner: Dried cod fish, potatoes, pickled beets, bread and butter.

Supper: Macaroni and cheese, milk, apple Betty.

SATURDAY

Breakfast: Oranges, oatmeal, bran muffins, coffee, milk.

Two Minutes a Day Help Make the Farm Pay

Would you believe that two minutes a day will help make your farm pay? Well, a good many farmers have proved that two minutes a day can help make the difference between profit and loss—when those two minutes are spent in keeping a simple farm record.

Some of the reasons for keeping farm accounts are here listed:

1. To provide information for possible constructive changes in the management of the farm.

2. To provide an annual inventory of farm property to show annual progress in savings and accumulations.

3. To show how much is made or lost each year.

4. To make available information on the farm business that may be useful in establishing improved credit.

5. To furnish accurate information for making out correct income tax reports when these are required.

6. To awaken greater interest and pride in one's own business.

This winter, farm account schools will be held in several towns of this county, where one may learn more about keeping a farm record. At the end of the year help in summarizing the records and in pointing out strong and weak points in one's business as shown by the records will be given.

Anyone desiring to attend these meetings is requested to communicate with the County Agent. It has been often times proved that farm record keeping has helped make the farm pay.

F. C. Smith
County Agent

Better Bottle Caps

Directors of the Essex County Dairymen's Association recently voted to utilize a part of each member's dues for the purpose of advertising Essex County produced milk.

Arrangements are being made with a large bottle cap manufacturer to create a design using the Essex County seal as motif: such design to be used on bottle caps, in newspaper advertisements, and elsewhere, and to be registered so that it can be used only by dealers cooperating with the Essex County Dairymen's Association.

Let's See If It Does

Are bushes crowding in on your pasture land? A few years more of neglect and the area will be worthless!

Strange as it may seem, quite a number of farmers have been observed devoting a few hours spare time moving off light brush with a stub-scythe or are applying the axe to sapling growth. A few have said that there are unemployed who also welcome a chance to do such work for a square meal or two and are glad of some fuel they can pick up that way.

Bulletins

Revised spray charts for apples, peaches, pears, cherries, grapes, and plums, and any of the following bulletins may be secured by writing the County Agent, F. C. Smith, Hathorne, Massachusetts:

"Pruning and Care of Shrubbery", Extension Leaflet No. 7, revised in January, 1933, by Frank A. Waugh, Massachusetts State College, Amherst.

"Inspection of Commercial Feeding Stuffs", Control Series Bulletin No. 64, Massachusetts State College.

"Insect and Fungus Enemies of the Grape", Farmers Bulletin No. 1220.

"Grape Propagation, Pruning, and Training", Farmers Bulletin No. 471.

"The Use of a Diary for Farm Accounts", Farmers Bulletin No. 782.

"The Downy Mildew of Cucumbers", by William L. Doran, Massachusetts State College, Amherst. Bulletin No. 283.

Dinner: Frankfurters and rolls, cole slaw, creamed potatoes, custard.

Supper: Baked beans, fruit salad, milk, tea, dark cake.

Leaders Trained For Nutrition Project in Eastern Part of County

The second leader training conference group in the nutrition project known as Our Money's Worth, met at the Hamilton Community House, Tuesday, February 14.

Leaders from Hamilton, Ipswich, Essex, Manchester, Beverly, Danvers, Gloucester, Middleton, and Peabody were present.

In the morning the leaders, under the direction of Miss May E. Foley, State Nutrition Specialist, prepared the luncheon of Mexican rarebit, cabbage and apple salad, whole wheat sandwiches, stewed raisins and cocoa. Table decorations consisted of valentine favors.

The afternoon discussion centered around the food habit score card and the planning of food budgets.

A good rule to follow in checking the amount of money spent for food is to divide every dollar spent for food into fifths: twenty cents or more for milk, twenty cents or more for vegetables and fruits, twenty cents or less for bread and cereals, twenty cents or less for meats and meat substitutes, twenty cents or less for fats, oils, and miscellaneous foods.

Mary M. McIntire

Radio Health Messages

Through the courtesy of Station WBZ, health messages sponsored by the Public Education Committee of the Massachusetts Medical Society and the Massachusetts Department of Public Health, will continue their series of Tuesday broadcasts at 4:15 P. M. on the following dates:

February 28. Effects of Fatigue.

March 7. Vacation Health.

March 14. The Use and Abuse of Serums and Vaccines.

March 21. Can We Prevent Diabetes? March 28. Hobbies and Health.

A special broadcast of Dramas of Science is also sponsored by the State Department of Public Health, and may be heard over WBZ at 10 P. M. on the following Thursdays:

March 2. The Viking's Gift.

March 9. Light in the Fog.

March 16. The Pointing Finger.

March 23. The Unknown Element.

March 30. Wiping Out Hell.

April 6. All On Account of Sylvia.

April 13. Nectar of the Gods.

New 4-H Moving Pictures

A film entitled "The 4-H Club Tour of Historic Shrines in the United States" has been shown at many club and community gatherings recently. The picture features 4-H girls who won the 1931 dress and style revue,

Are You Ready For These Contests?

Essex County 4-H members will have another opportunity this year to enter many worthwhile competitions. Some of these contests will enable members to take trips, others will mean cash prizes and still others, scholarships. All are very beneficial. Above all in importance is the thrill and experience of competing with one another.

The 4-H advisory committee is meeting to plan a 4-H Club Girls' Day. This will be a day set aside especially for girls and will include in its program the dress contest, music appreciation contest and a competition for food club girls. Every club in the county should plan to have at least one girl attend this big day for 4-H members. In order to give a little fore-handed information on the music appreciation contest we are listing the selections to be used in the contest and advise that everyone listen to Uncle George's radio broadcast on Saturdays over WBZ. The selections will be played over that station during the 4-H broadcast at that time. This is an excellent opportunity for members to get acquainted with the selections. Further information on the contests will be sent on request, by the County Club Agent.

Here are the music selections: "Marche Militaire", Shubert; "Largo" (from "Xerxes"), Handel; "Spring Song", Mendelssohn; "Invitation to the Dance", Weber; "Pilgrim's Chorus" (from "Tannhauser"), Wagner; "Moonlight Sonata", Beethoven; "Hungarian Dance No. 5", Brahms; "Funeral March of a Marionette", Gounod; "Barcarolle" (from the "Tales of Hoffman"), Offenbach; "Goliwogg's Cakewalk" (from the "Children's Corner Suite"), Debussy.

Nutrition

The fourth and last nutrition meeting in the northern part of the county was held in the West Boxford Congregational Church vestry on January 12.

Twenty-three leaders were present at the meeting. Final reports from six of these communities are already in the office.

The total number of women reached through this project is two hundred and ninety. In addition, three hundred and fifty children have been able to profit by it.

and is particularly interesting to Massachusetts members since Mary Marley of Middlesex County was one of the winners that year.

The County Club Agent has scheduled another film, "Under the 4-H Flag," for use in this county until March 15. Leaders desiring this picture shown in their communities are requested to get in touch with Horace J. Shute.

Do Not Waste Fats

Prepared by May E. Foley,
Extension Nutritionist

Fats are valuable in the diet for several reasons. They give flavor and interest to food, they furnish fuel for heat and energy and they satisfy hunger and give a feeling of satisfaction. We say that meat "stays by" us a longer time than most other foods. This is because of more or less large amounts of fat which all meat, even lean meat contains. In fact fat salt pork and fat bacon are not considered as protein but as fat foods. We must take care not to eat too large quantities of fat, particularly food soaked in fat as it often puts too great a strain upon digestion.

Butter is the fat best liked by most of us, the easiest to digest and the most valuable for the body. However, it is too expensive for many uses and burns too easily when heated to a high temperature. Just now lard is the cheapest fat on the market and can well be used for most cooking purposes. Bacon fat is wholesome and should never be wasted. When used with spices and molasses in cake or cookies, the flavor of the bacon is not detected. Chicken fat is excellent for making white sauce and cake, pie-crust and other shortening. Many homemakers save all fat drippings and fryings and clarify them. This is easy to do. Put fat in large kettle and add two or three times as much water as fat. Boil rapidly for five minutes, allow to cool and skim off fat.

Spring Projects

New Clothes From Old

The project known as New Clothes From Old is now being carried on in Middleton, Newburyport, and Gloucester.

Communities wishing help in re-modelling spring clothing are asked to send in applications to the Extension Department of the Essex County Agricultural School.

Home Grounds Improvement

Professor Arnold Davis, Extension Horticulturist of the Massachusetts State College is planning three Home Ground Improvement meetings in Topsfield and Essex this Spring. Neighboring communities interested are cordially invited to attend. Dates will be announced at a later time.

Health Hints

Hendrick Van Loon says: "The Greeks were the first people to recognize that man is not divided into two equal parts, body and soul but that the body and soul are one; that a healthy body is necessary to encourage a healthy soul and a healthy soul is an indispensable factor of a healthy body."

And quoth Wendell Phillips: "Said the flu germ to the pneumonia germ: 'I go to prepare a place for thee so that where I am ye may be also.'"

ESSEX FARMER AND HOME MAKER

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VOL. 14

HATHORNE, MASS., MARCH, 1933

NO. 3

"A Friend at Court"

"I believe thoroughly in agricultural education. I regard it as one of the most important and essential branches of the whole educational effort that is being carried on in the United States. I am a firm believer also in the value of the cooperative research and experimental work and the extension service, which state institutions in cooperation with the Federal government are rendering.

"I think it would be nothing short of disaster if any of this work were seriously curtailed. Particularly in these times when farmers are having such a desperate struggle to maintain themselves. I think it supremely important that they should have the benefit of the expert advice that colleges, experimental stations, and extension services are able to give them and it is equally important that we should continue to hold out to their children opportunities for an education that will make them something more than field drudges.

"What I have said with respect to the agricultural colleges and their allied services applies with equal force to the lesser schools of agriculture and to the agricultural education now being carried on with such excellent promise in consolidated high schools in the rural communities.

"I am glad that I have the opportunity of expressing myself on this subject on which I have very strong convictions."

Franklin D. Roosevelt
In a letter to the Editor of
The Progressive Farmer

Watch Your Bees and Clues

Any sunny day when the temperature is above 60 degrees is a good

day to examine bees to see whether they have survived the winter weather. They should still have stores enough to last until apple blossom time.

Feeding bee candy will help out those which are low in stores. Ordering package bees to start new swarms or make the present swarms stronger is the answer to dead or weak colonies.



Dolly's Foremost of High Rock, one of the highest producing sires in the Guernsey breed, owned by the Argilla Farm in Ipswich

Dolly's Foremost A Proven Sire

A proven sire of the Guernsey breed, having one of the highest records of milk and fat production for twenty A. R. daughters, is Dolly's Foremost of High Rock. His twenty tested daughters have an average of 12,825.1 and 696.6 pounds of milk and fat respectively. According to the American Guernsey Cattle Club, Dolly's Foremost of High Rock is the only Guernsey bull whose first twenty A. R. daughters have as high an average of butterfat.

His outstanding daughter, Palotterie of High Rock, holds the world record in class BB, giving in one year, 16,147 pounds of milk and 921 pounds of fat. She is the only Guernsey to make three records exceeding 900 pounds of fat.

Another daughter, Argilla Dolly Lee, was judged the best Guernsey female bred and owned in the State and shown at the Brockton Fair in 1932.

Proved Sire Basis For Sound Program

K. W. Forman

A good typey bull may or may not transmit milk production to his offspring. You cannot tell by looking at an animal how that animal will breed. The pedigree, as we know, does not tell us about the producing abilities of all the offspring of each animal in the pedigree; therefore it cannot be considered as the best criterion for judging the breeding powers of an animal. The Progeny Test is the only reliable way by which a breeder can judge the ability of a bull to transmit production to his daughters. Our great constructive step in animal breeding today is the application of the progeny test to all breeding males. This is spoken of as the Proved Sire Program, which was started last year in Massachusetts.

When speaking of a proved sire we are thinking in terms of those bulls which have proved their worth substantially increasing production of their daughters as compared with their dams. The proven bull must have at least six unselected daughters from six different dams, both the daughters and the dams having yearly records. The comparisons are made by calculating the records of both the dams and their daughters to a mature equivalent.

Why not start and keep records on your young bull now? If he is not worth keeping he and his daughters are a great liability when you consider it costs about \$150 to rear each of them to milking age and you have lost over three years in your breeding work. They should not be used to perpetuate their kind and the sooner you get rid of the bull the better. If he shows that his daughters are improving on their dams you have a good bull. He is an asset

(Con. on page 3, col. 3)

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President, Thomas Smith, Methuen
Secretary, Stephen Dyer, Lawrence

Eastern Massachusetts Society of Beekeepers
President, George A. Melgs, Hathorne
Secretary, Earl B. Pride, East Lynn

Calendar

March 20—The first day of spring.
March 22—Farmers' and Homemakers' Day.

March 23-25—First Essex County 4-H Poultry and Egg Show at 181 Merrimac St., Haverhill.

March 28—Advisory Council Meeting of the Women's Extension Department.

April 26-27—Professor Monahan—to be announced.

Essex Students Win Triple Honors in Public Speaking

Having won first, second, and fourth places in an interscholastic public speaking contest, sponsored by the Future Farmers of America, representatives of this School placed second, third and fourth in the State Contest held recently at Hopkins Academy in Hadley.

A Regional Contest to be held at Springfield in September will determine which of the competitors will enter the National Contest at Kansas City in November.

At the State contest, Ernest Thayer of Lynn placed second, speaking on the topic, "The Voluntary Allotment Plan." Clarence Patterson of Peabody won third place discussing

Athletic Banquet Highly Successful

The third annual alumni and athletic banquet, sponsored largely by Horace J. Shute, Secretary of the Alumni Association, was well attended and extremely successful.

Mr. H. W. Gibson, guest speaker of the evening, held an appreciative audience as he stressed the essentials of 'playing the game.'

Awards were made to the following athletic members of both the home-making and agricultural departments:

Football Sweaters and Letters: Bernard Reilly, Francis Sparks, Andover; Richard Lavin, Frank Pelczar, Edward Glowacki, Lawrence; Benjamin Gregory, Revere; Frank Baczewski, Lynn; Ernest Stansfield, Danvers; Ernest Lemieux, Salem; Joseph Scoglio, Beverly.

Football Letters: Arthur Bulgaris, Byfield; Sydney Porter, Joseph Desmond, Beverly; Richard Poirier, Groveland.

Girls' Basketball Letters: Irene Burbeck, Mary Peterson, Salem; Helen Rogers, Lynn; Mary Guppy, Olive Pinney, Danvers, Nelda Bourdelais, Lawrence. Numerals: Victoria Townsend, Saugus; Roberta Thompson, Lynn; Elvira Belcher, Hathorne.

Boys' Basketball Letters: James Melville, William Murphy, Lynn; Elmer Flanders, Rockport; Alfred Webb, Andover. Letters: Robert Bolcome, Gloucester; Joseph Desmond, Robert Bartlett, Beverly; Gordon Cool, Manchester. Numerals: Ernest Stansfield, Danvers; Richard Poirier, Groveland; Sidney Porter, Beverly; Forrest Haynes, Haverhill; Frank Baczewski, Lynn.

Note To The Alumni

The second issue of the Green and White, student publication devoted to scholastic and alumni news has an even longer list of interesting articles than the fall edition.

Alumni may procure their copies through the School.

Basketball

The Essex Aggies displayed their priority in athletics when, at the end of the basketball season it was announced that they had won nine of the eleven games they played.

Defeated but once by Peabody (34-30), and once by Salem Teachers' College (21-19), they were victorious in the following games:

Marblehead, 38-24; Norfolk, 35-22; Bristol, 42-17; Peabody, 31-27; Salem Teachers' College, 20-8; Norfolk, 23-18; Marblehead, 35-20; Stockbridge, 22-14; Bristol, 39-27.

the question, "Are Farmers Justly Taxed?" E. Hartwell Daley of Salem placed fourth with a discussion of "The Insect Menace."

News of The School At a Glance

February 27

Reverend Hazel I. Kirk of Danvers was guest speaker at the regular assembly of the homemaking department, relating to the students the birth dates of notable people born in the month of February.

March 8

The faculty of the Danvers High School were guests of this School when J. Asbury Pitman, President of the Salem Teachers' College, lectured on his European travels. It was Mr. Pitman's opinion that our schools in America compare favorably with those on the Continent and in England.

Tea was served to the guests by the homemaking staff.

March 15

The athletic banquet was prepared and served by faculty and students of the homemaking department.

Alumni Notes

William Bamford, class of 1932, is now living at 14 Pleasant St., North Andover.

Sidney Batchelder, class of 1932, writes that he enjoyed a winter camping trip through Maine and the White Mountains. He made the trip on skis and carried a pack weighing thirty-five pounds.

Mr. and Mrs. Sidney L. Butler are living at 31 Lincoln St., North Andover. Sidney is a graduate of '26.

George Garland, '22, is New England Representative of the Economy Fuse and Manufacturing Company of Chicago. He has made recent visits to the School.

Carl Swanson, '32 plans to enter Massachusetts State College this fall.

Irving Jaquith, a former student, is manager of an estate in Swampscott.

Ida May Perkins, '30, is employed at White and Johnson, Florists in Wakefield. She assists in lectures given by Mr. White on "Rock Garden Construction."

Helen Belanger, former student, has a retail flower store in Haverhill.

Word has been received that Robert Waters, class of 1930, was recently married. Mr. and Mrs. Waters will reside in Natick. Robert is employed on the campus of Wellesley College where he has care of all tress and shrub plantings.

James Henry Curran, class of 1924, and his brother, Thomas, are erecting a greenhouse on Pickering Street in Danvers.

Announcement has been made of the marriage of Carl D. Phipps, class of 1921, to Miss Viola Ricker of Hudson, on March 19, 1933. On returning from a wedding trip in Havanna, they will reside in Berlin, Massachusetts, where Mr. Phipps is employed as an orchardist for the Chedeco Farm.

Auto Mechanics

That several Senior students have voluntarily requested additional time for the ten weeks' course in auto mechanics is sufficient endorsement for the popularity of a course in which they are thoroughly instructed.

The care of cars and farm motors is the prime object of the course. Instructor Stuart recently said that the boys who are interested in the work actually learn the fundamentals of running and caring for motors. He added that of the accomplishments completed in this year's course, the most outstanding have been: adjusting brakes, grinding valves, reboring cylinders, replacing broken springs, repairing clutches, and cleaning carburetors.

The course on the whole teaches students the necessity for keeping their cars and farm motors in good running order.

How Much Lime Per Acre?

The approximate amounts of lime removed from the soil, per acre, by common crops with average yields are here recorded:

Alfalfa (100 to 150 pounds); Cabbage (100 to 120 pounds); Peaches (125 to 150 pounds); Red Clover, Soy Beans, Onions, Apples (all, from 75 to 100 pounds); Carrots (50 to 60 pounds); Garden Peas (40 to 50 pounds); Cauliflower (40 to 50 pounds); Corn (25 to 30 pounds); Barley (30 to 35 pounds); Potatoes (20 to 30 pounds); Wheat (20 to 25 pounds).

The above table indicates the approximate annual depletion of the soil, hence the amount of lime needed to keep the crop yield up to normal.

F. C. Smith.

Some Common Errors

In Spraying

1. Gun wide open when spraying nearby branches. This will cause "spray burn."
2. Too much material in one spot.
3. Missing tips of branches.
4. Waving of gun—irregular and "hit and miss" spraying.
5. Circling tree in wrong direction from that of the tank. This entangles the operator of hose.
6. Too many nozzles for capacity of pump.
7. Dragging the hose by hand instead of letting the tractor or horses pull it.

Fertilizing and Spraying Insure Better Yields

That it pays to fertilize and spray, is shown by the fact that a farm yielding 458 bushels of potatoes per

acre makes a profit of \$48.62 over a field yielding 200 bushels per acre, although the cost of producing the former is much greater than that of producing the low yield.

To be exact, it has been figured that in the Connecticut Valley, Massachusetts, the seed cost per acre for a yield of 458 bushels was double that of the yield of 200 bushels per acre. Fertilizer cost was \$46.67 against \$11.20. Spray materials amounted to \$9.06 for the high yield and \$1.00 for the low, and man labor \$47 versus \$11. The total cost per bushel of the high yield was 51 cents while that of the low was 25 cents. But at 90 cents per bushel the high yield profited \$178.62 while the low yield netted but \$130. Hence a total profit of \$48.62 for the high yield.

Extracted from records of Roy Moser.

M. S. C.

Seeding On Late Frosts May Save Doubtful Stands

Winter injury of fall seeded grass mixtures may show up this spring to threaten the stand. Sowing seed in March to work in on the late frosts on areas where the seeding appears doubtful may save the crop on some fields. A mixture of timothy and clover is useful for this purpose. At the first opportunity when the ground surface is wet and sticky the seed may be sown.

To roll or cultipack the ground on new seedlings early in the spring is a practice followed by many good farmers.

In cases where an entire seeding fails to show evidence of a satisfactory catch by the time first growth should appear in April, one method is to harrow lightly and reseed. On land where weeds are likely to be troublesome, a nurse crop of oats, or, oats and barley may be added. The nurse crop may then be pastured off (or cut high) to provide early July feed after which the clover and grasses should be allowed to develop for a late hay crop or pasture.

Seeding on ground which is firm beneath, with only the surface few inches mellow and fine to cover the seed is often preferable to seeding on loose spring plowed soil. For this reason, light disking of seed beds which winter killed, or, even seeding spots early in the spring to work in with the frosts are often surprisingly satisfactory as a means of getting a catch and of saving the crop without the expense of plowing.

Ralph W. Donaldson.
Massachusetts State College.

"An acre of hay contains fifty per cent more protein June 20th than if cut one month later."

Ford Prince, Agronomist,
University of New Hampshire.

New Bulletins

The following are new and valuable bulletins, obtainable through the departments signified:

Bulletin No. 289—"Hereditary and Environmental Factors Affecting Variability in Egg Production." Massachusetts State College.

Bulletin No. 290—"The Story of Field A of the Massachusetts Agricultural Experiment Station." A review of experiments with nitrogen fertilizers. Massachusetts State College.

"Insure Your Crops with Formaldehyde Seed Treatment." E. I. DuPont de Nemours and Company, Wilmington, Delaware.

Bulletin No. 292—"Carbon Disulfide Emulsion for the Control of the Root-Knot Nematode." Massachusetts Agricultural Experiment Station, Amherst, Massachusetts.

High Producing Cows

The National Dairy Association of the United States has awarded diplomas to the following men for the unusual records attained by their herds during the fiscal year ending in March 1932:

Edward Shattuck, Andover. Total of 21 cows averaging 396 pounds butterfat per cow for the year.

Harvey G. Turner, Andover. Total of 8 cows averaging 396 pounds butterfat per cow.

W. B. Corliss, Andover. Total of 5 cows averaging 363 pounds butterfat per cow.

Miss Jane Shattuck, Topsfield. Total of 23 cows averaging 359 pounds butterfat per cow.

William Mason, Beverly Farms. Total of 10 cows averaging 352 pounds butterfat per cow.

Appleton Farms, Ipswich. Total of 8 cows averaging 332 pounds butterfat per cow.

PROVED SIRE

(Con. from page 1, col. 3)

and your breeding work is advancing. He will soon prove his worth. Remember the slogan "The bull is at least half the herd."

It is true that farmers with small herds do not wish to keep two bulls unless they inbreed and in some cases this would be harmful or disastrous. It is possible to get around these difficulties as well as to find money to pay the testing dues necessary to put records on the daughters and dams that prove this bull.

If the reader is interested in such a practical plan which is operating in many states, read the article in the January 25th number of Hoard's Dairyman under the title "Building on Breeding" and the sub-title "Proving the Dairy Sire Made a Practical Possibility by Co-operative Breeding Circles". Also U. S. D. A. Farmers' Bulletin No. 1532 under the title "Dairy Herd Improvement through Co-operative Bull Associations."

Eggs For Every Occasion

May E. Foley

Eggs are very reasonable in price and they seem to taste better in the spring than at any other time of year. They may be used at any meal, as the main dish or in the dessert.

Eggs and milk are considered our most nearly perfect foods, and may be used as the basis of many nourishing and appetizing dishes. They are rich in vitamins and minerals, besides being a meat substitute. An egg a day for each member of the family will add unusual food value at small cost. The baby of six months may begin with a teaspoon of egg yolk, which is gradually increased until at nine months he eats a yolk every day.

Steamed Eggs

To steam eggs, place a tablespoon of bacon fat or butter in a frying pan, heat over a low fire until the fat is melted, then add the number of eggs desired and cover tightly. When the white is set, add a tablespoon of boiling water, cover, and cook until the steam has formed a white coating over the top of the egg yolk.

Spanish Cream

2 teaspoons gelatin	1-3 cup flour
2 cups milk	1-4 teaspoon salt
2 eggs	1 teaspoon vanilla

Soak gelatin in 2 tablespoons water. Separate eggs, scald milk in upper part of double boiler, add soaked gelatin to hot milk and then pour it over the slightly beaten egg yolks. Return the mixture to double boiler and cook it until it begins to thicken, stirring constantly. Remove from fire at once and add salt and vanilla. Cool the custard until it begins to set and then fold in the beaten egg whites. Chill and serve with cream. Serves five or six.

Our Money's Worth

The second meeting held in the southern part of the county for project leaders, in Norishing Low Cost Meals, was held March 14 at the Hamilton Community House. This meeting was conducted by Miss May E. Foley, State Nutrition Specialist. Leaders were present from Ipswich, Essex, Manchester, Beverly, Danvers, South Peabody, and Hamilton.

The menu prepared by the leaders consisted of vegetable plate, graham bread, whole wheat pudding with brown sugar and milk for dessert.

During the afternoon Miss Foley stressed the value of vegetables in the diet, the cooking and the vitamin content of vegetables.

A visitor from the Ipswich Welfare department was present at this meeting.

Over three hundred women have finished this course in the northern part of the county.

May M. McIntire.

4-H Service Club

The Essex County Service Club held its first meeting of the year at the Women's Club Building, West Newbury Square, Saturday, February 25 at 7 P. M. Vice President Eleanor Buckley directed the business while Lillian Knott acted as secretary, and Joseph Marquette, treasurer. The program outlined for the coming meetings was read and approved. Justin Little was elected Steward, to receive the pass word from all members present at the following meetings. Viola Messer was elected news reporter for 1933.

Following the business meeting Viola Messer spoke to the group on her trip to the National 4-H Camp at Washington. Games were enjoyed and refreshments were served by the West Newbury girls.

Members were present from West Newbury, Byfield, Groveland, Newburyport, and Methuen. The next meeting is scheduled for May.

Viola Messer,
Reporter.

Home Nursing

Extension classes in Home Nursing, under the direction of Mrs. Mary E. Roundy, R. N., Instructor in the Homemaking School, will start in April in the following communities: Lawrence, Amesbury, Methuen, and West Gloucester. Anyone interested is asked to send her name to Mrs. Bernard J. Manning, 1 Tremont Ave., Amesbury; Mrs. Marion Costello, 33 E. Haverhill St., Lawrence; Mrs. A. Harriet Hathaway, 31 Elm St., Methuen, or Mrs. James B. Benham, 599 Essex Ave., West Gloucester.

Mary M. McIntire.

Questions and Answers

May E. Foley

Q. May cocoa be substituted for chocolate in cakes?

A. Cocoa is much less expensive than chocolate and may well be substituted for cocoa in most recipes. A one-ounce square of chocolate is equivalent to three tablespoons of cocoa, plus one-half tablespoon of fat.

Q. What is celery salt?

A. Celery salt is made from diced ground celery and salt. It may easily be made at home with little trouble and expense. Dry the leaves from celery and rub through a fine sieve. Mix this powder with equal parts of salt and put into a shaker for convenience. It adds flavor to salads, salad dressing, white sauce, soup, and many other dishes.

Q. Many old recipes are given in ounces. How can these measures be changed to common ones now used?

A. An ounce of liquid or fat equals two tablespoons. Flour, sugar, cornstarch and other ingredients vary greatly, and no general rule can be given.

4-H Club Egg Laying Results

In January and February the Live-wire Poultry Club of Haverhill was still very much alive, winning for the third time the monthly banner awarded for the highest average of eggs produced by the members' hens. The months are flying by, club members. Can't some of you beat Haverhill's record and make the banner yours?

In January, blue ribbons were awarded to those receiving twenty eggs per bird or over; red ribbons for eighteen to twenty; and yellow for sixteen to eighteen.

Blue ribbons were won by the following individuals: Fred DeChristofaro, Alexander DeChristofaro, Arthur Yemma, Mitchell Hyder, Theodore King, John Makrogolous, Edward Sirski, John Taylor, all of Haverhill; Albert Batcheller, Andover; Ernest Law, Methuen; Edward Mears, Essex.

Red ribbons were won by John Kulikowski, Rene Deloge, Andover; Merle MacDonald, Tony Moskal, Arthur Spohr, Alged Ramaika, Haverhill.

The following won yellow ribbons: Maurice Legare, Michael Yemma, Orlando Yemma, Haverhill; Ernest Parson, Andover; Frank Corbin, Newbury; Bryce Ham, Bradford; Alfred Landers, Ernest Flynn, Wenham.

In February, blue ribbons were awarded to those receiving twenty-two eggs per bird or over; red ribbons to those eighteen to twenty-two; and yellow for sixteen to eighteen.

Blue ribbons were won by the following: Robert Gallagher, Sidney Chadwick, Fred DeChristofaro, Michael Yemma, Orlando Yemma, Haverhill; Edward Mears, Essex; Alfred Landers, Wenham.

Red ribbons were won by Mitchell Hyder, Edward Hyder, Theodore King, John Makrogolous, Tony Moskal, Edward Sirski, John Sirski, John Taylor, Haverhill; Ernest Law, Methuen; Albert Batcheller, Albert Gilman, John Kulikowski, Andover.

Yellow ribbons were won by Ralph Clough, Merle MacDonald, John Meehan, Arthur Spohr, Arthur Bradstreet, John McCarty, Haverhill; Rene Deloge, Andover; Thomas Bullock, Essex.

Don't forget to hand in your reports each month.

"How Does Your Garden Grow"

Professor A. M. Davis, Assistant Extension Horticulturalist, is to work in Topsfield on Thursdays, May 11, June 8, and July 6; and in Essex on Fridays, May 12, June 9, and July 7.

Anyone interested in these meetings on Home Grounds Improvement may call Mrs. George Dow, Topsfield 128, or Miss Maidee Polleys, Essex 55, to enroll.

ESSEX FARMER AND HOME MAKER

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NO. 3

A New Pest In Essex County

The mildness of the past winter insures us of extensive insect activity this summer. One of the newer insects in Essex County that we should be on guard for is the Japanese beetle. This beetle was first introduced into New Jersey from Japan in 1916 and has spread rapidly since. The adult beetle may be recognized by its bright metallic green color, though the greater part of the wing covers are coppery brown. It varies in length from three-sixteenths to seven-sixteenths of an inch.

In the winter the beetle lives as a grub or larvae in the ground. During the fall and spring the grubs feed on roots of grasses and vegetables. Toward the middle of June the adult beetles appear and are most active in July and August. During this period they feed on the foliage of many of our economic crops. They especially prefer apple, quince, peach, sweet cherry, plum, grape, blackberry, clover, corn, soybean, linden, birch, oak, elm, willow, rose, smart weed, and many of our shade trees, flowers, and ornamental shrubs.

The grubs in the lawn may be controlled by an application of commercial dry lead arsenate (dry form) at the rate of five pounds per 1,000 square feet. This application will last from three to four years. The larvae may be killed by drenching the sod of lawns with carbon bisulfide emulsion. Thorough spray of lead arsenate should be applied by June 25th and followed by a second application if rain should fall after the first application. For further information write for U. S. D. A. Department Circular No. 363, through Mr. R. S. Clifton, 12 South Market St., Boston, Massachusetts.

A. G. Perkins,

Round About the County

The project, New Clothes from Old, is to be carried on in South Groveland and West Newbury.

A Home Furnishing Project started in Rowley on April 18.

Professor William B. Cole, Specialist in Horticultural Manufactures, conducted conferences dealing with food preservation in Lawrence and Beverly last week.

Mrs. Mary Roundy, R. N., is in charge of Home Nursing Projects in Lawrence, Amesbury, Centerville, (Beverly), and West Gloucester.

Make Your Fruit Trees Bear

Instructor C. M. Wood

The question, "Why doesn't my fruit tree bear, even though it blossoms freely?" is frequently asked. There are several reasons why a blossoming fruit tree does not bear. Among the reasons are lack of tree vigor, insect and disease attacks, lack of plant food, unfavorable weather conditions, lack of pollinizing insects and suitable pollen.



Drink More Milk

In order to overcome these causes of unfruitfulness, first of all the tree should be well cared for by proper pruning, timely and thorough spraying for pest control, sufficient fertilizer and careful soil management. If the weather is fair there are usually sufficient flying bees, both wild and domestic, to take care of the dissemination of pollen. But suitable pollen must be supplied in order to effect pollination.

Most varieties of the tree fruits are self-sterile, that is, they will not pollinate themselves. Inter-fertile varieties, ones which pollinate each other, should be planted together. Of our common apple varieties McIntosh, Wealthy, Cortland, and Delicious are good pollinizers. Baldwin and Gravenstein are not good pollinizers. Of the new varieties of apples Early Mc-

(Continued on page 3)

Protecting Native Plants

All of us love wild flowers. They are a part of spring. Extermination of many interesting and beautiful specimens through thoughtlessness and indiscriminate picking is a danger not one of us would deliberately incur. Flowers, unless left for seed, will eventually die out in certain places. It is a hope of the New England Wild Flower Preservation Society, that our love for natural beauty will induce us to pick few wild flowers instead of many, and to use moderation in breaking large branches of flowering shrubs which will live in water but a few days, but represent the growth of many years.

"Many of the most effective flowers may be gathered, away from the wayside, without fear of doing any permanent injury. Daisies, buttercups, clover, wild roses, meadow-sweet, steeple-bush, asters, goldenrod, and other vigorous and abundantly growing plants will yield ample material for decoration, and may be gathered almost with impunity."

From the purchase of the rarer flowers, especially of the purple fringed orchid, sabbatia, fringed cat-tail, or trailing arbutus, everyone is urged to abstain.

Would we be more careful if we paraphrased the old bit of philosophy about the nail, the shoe, the horse, the rider, the nation, in this way:

For the want of a seed the flower was lost,

For the want of the flower the spring was lost,

For the want of spring, beauty was lost—

And all for the want of a seed!

Cow Population

A slight loss, in general, marks the 1933 cow population in Essex County with a decrease of 427 bovines under last year's total of 10,580.

TB tests explain a portion of the diminished population, and a reduction in the numbers of herds in the county answers to the remaining portion.

Towns showing an increase are Amesbury, Andover, Groveland, Lynn, Lynnfield, Peabody, Rockport, Wenham, and West Newbury. Of these, Andover boasts the greatest increase with sixteen new herds including a total increase of 135 cows.

Figures showing a comparison by towns of the cow population for 1932 and 1933 will be sent, on request, by the County Agent.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
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Calendar

April 21—May 8—Homemaking Department on vacation.

April 26—Professor W. C. Monahan of Massachusetts State College to be in Haverhill at the City Hall with Haverhill Poultry Club.

April 27—Professor Monahan at this School—County Poultry Program.
May 6—High School Day at Massachusetts State College.

May 9—Annual Business Meeting of the Home Demonstration Agent and her assistants.

May 13—4-H Handicraft Contest at the School.

May 20—4-H Girls' Day—Food and Dress Contests.

May 27—4-H Bread Contest at the School.

June 3—4-H Club Field Day.

Officers Elected To Future Farmers of America

At the last F. F. A. elections, the following were made officers for the coming year:

President: Sidney Porter, Beverly;
Vice President: Ernest Thayer, Lynn;
Secretary: E. Hartwell Daley, Salem;
Treasurer: Kenneth Nunan, Saugus;
Reporter: Clinton Spencer, Ipswich;
Executive Committee: Henry Richardson, Lawrence; Clarence Patterson, Peabody; John Stepanchuk, Haverhill.

Alumni Notes

Palmer Perley, class of 1927, visited the School on March 28. It was learned then that he is an established nurseryman in Rowley, growing a wide variety of herbaceous perennials. Of added interest is the fact that he has grafted some of the new fruit varieties from the School nursery, on trees of an orchard in Rowley.

Other March visitors to the School were Stanley Emerson, class of 1928, and Kenward Griffin, '31.

Robert M. Ellis, class of 1929, is now living at Pine Street, Dover-Foxcroft, Maine, where he is employed on his uncle's 110-acre farm. It is chiefly a dairy farm, with small fruits and strawberries grown on the side.

Modern Homemakers

Ethel M. Moore

Head of the Homemaking Dept.

With the coming of spring one naturally turns to the out of doors and begins to think and plan for the gardens, both flower and vegetable. That is one reason why the Homemaking department Junior girls are starting a ten weeks' course in gardening.

Another reason is that a homemaker who is a real homemaker must not only manage her home in an efficient manner, feed and clothe her family, see that the interior of the home is attractive and comfortable, but she must also give intelligent thought to the grounds surrounding her home.

The homemaker of today has a bigger job than the one of a few years ago. True, she may have labor-saving devices within her home which aid in reducing manual labor, but she has a larger number of outside influences with which to contend than ever before. It is with this idea in mind, namely to train the girl of today to be a more efficient homemaker tomorrow, that not only this unit of gardening but all subjects related to the home are incorporated in the homemaking curriculum.

Crop Records Tell The Story

Do you know your crops are paying?

Would you like a simplified form of determining whether they pay? Then keep crop records under the following headings:

1. Kind and variety; 2. Source of seed; 3. Date planted or set; 4. Date well up; 5. Days to come up; 6. Date of blooming; 7. Date of first harvest; 8. Days from bloom to harvest; 9. Days from planting to harvest.

It is about time to be thinking of getting strawberry plants. The State College says that May 1st is a safe date for planting. Early planting enables the plants to take advantage of the moisture in the soil which, later on, is apt to dry up.

The Value of Vocational Agriculture

E. J. Donaghy
Apprentice Teacher

Before entering into the value of a subject one must outline the purpose, the objectives, and the aims of that subject.

Vocational agriculture as taught in the County Schools has a specific aim and purpose in that this type of education prepares the student for useful and efficient service in the occupation directly connected with "the tillage of the soil, the care and development of domestic animals and numerous branches of production work on the farm." This is the type of education and training offered to those individuals who have indicated a desire to enter into this field of endeavor. As admirably expressed by one leader in the field,

"It aims to develop the habits and attitudes, the knowledge and skills, and the appreciations and ideals to success in specific farming occupations."

In addition to its social values this type of education has for one of its objectives the technical training which is a valuable asset to every student, for it develops the mental powers of observation and results in the discussion of objects as they actually exist in their own places. It takes the student to the field, the farm, the forest, the stable, the dairy and the market. It demands the most definite and painstaking work and that in turn calls for exercise of the great diversity of power on the part of the student.

Furthermore, it has additional technical values for it introduces such subjects as chemistry, in its relations to agriculture; dairy industry with milk tests, butter making, dairy mechanics, bacteriology, and the like; breeding of plants and animals as in the science of botany, pomology, floriculture, olericulture, poultry husbandry; studies of the soil in their physical, chemical and biological state and relations; meteorology; animal husbandry, nutrition and principles of feeding; physiology; and entomology and other phases of biology. From this great body of subjects and problems it is obvious that the student is able to develop as thorough and as scientific an education as those in other departments of learning.

In conclusion I am profoundly convinced that education by means of vocational agriculture which has been intensely formulated during the last twenty-five years has in my opinion been and will remain to be one of the most valuable contributions to the method of education in general.

JUNE 3
4-H CLUB
FIELD DAY

Production Necessary To Pay Feed

Poultry

Dr. E. G. Misner of Cornell states, "Feed is about half the cost of keeping a hen; 90 pounds being required per year for slightly better than average production. The percentage required for a hen to pay for her feed has been computed according to the following formula:

"Price of feed per hundred pounds divided by the price of a dozen eggs multiplied by three."

On the average twenty per cent production should pay feed costs. About 120 eggs per hen pays all costs. Right now twenty-five per cent production is necessary for feed—or fifty per cent production to cover all costs.

F. C. Smith,
County Agent.

Motion Pictures Depict Spraying Methods

Requests have been made that the film of spraying methods shown at recent meetings in the county, be repeated. If there are sufficient requests the pictures will be shown here at the School in the near future.

These motion pictures were shown at fifty-four meetings with an attendance of 1635 fruit growers. At nine of these meetings each person was asked to fill out a survey card. Through these, one hundred and seventeen fruit growers reported the ownership of 70,000 fruit trees.

What did the fruit growers get out of these pictures? Sixty-eight per cent decided they should change their types of spray nozzle. Forty-six per cent were convinced that they should use higher pressure. Thirty-two per cent admitted they should use more materials, and thirty-two per cent got new ideas on the best way to fill a tank.

If you did not see this film and would like to, write the County Agent at this School.

F. C. Smith.

90 Percent Apple Club

The following fruit growers of Essex County have enrolled in the 90% Clean Apple Club:

Appleton Farms, Ipswich; W. W. Sykes, Lawrence; Mrs. Hugh Clegg, Methuen; N. M. Johnson, West Gloucester; Leon Ellis, Saugus; Melville Grey, Wenham; T. A. Nolan, West Newbury; Robert Sawyer, Bradford; G. Wilton Dias, Haverhill.

Do not delay the pruning of grape vines. With continued warm weather the season will be early. Care should be taken not to prune after the vines "bleed."

Summer Guests

The State Department of Agriculture is listing, free of charge, the names of persons or farms having facilities available for summer guests.

If you are interested in further details please write to the Women's Division of the Essex County Extension Service, Hathorne.

Brewers' Grains For Bossy

C. J. Fawcett, extension animal husbandry specialist of the Massachusetts State College, states that he has received many inquiries as to the value of brewers' grains for cattle, and that he does not hesitate to recommend them. He says that brewed grains make an excellent feed for dairy cows.

Dairymen living near a brewery may find it to their advantage to buy the wet brewers' grains, which make a good substitute for corn silage as a succulent feed. The brewers' grains really are superior to silage, since they contain more protein and less fiber. Dried brewers' grains are high in protein, and may be used in the grain mixture fed to Bossy.

In bygone days, before prohibition and automobiles, brewers' grains were also used as a feed for horses.

Control of Garden In- sects and Diseases

Instructor A. L. Dacy

Maximum success in the control of garden pests involves more than spraying and dusting. These are but two of at least twenty methods of attacking the problem. A seasonal program beginning right now will be most effective.

"Forewarned is fore armed." A knowledge of (1) the particular pests we must expect to fight; (2) where and in what form they spend the winter; (3) how we may recognize them and the first evidence of their presence; (4) the best material and method to use in their control, strengthens our attack and makes control easier and more certain.

Much of the above information is furnished by Extension Leaflet 116, a free copy of which may be obtained by a post-card request to the Extension Service, M. S. C., Amherst, Massachusetts. Let's start our campaign by securing and studying Leaflet 116.

Crop rotation prevents loss due to attack by soil-inhabiting diseases. Let us plan our garden with this important help in mind.

Weak, crowded, improperly nourished plants invite attack and are the first to succumb. Healthy plants, grown by correct cultural practices, can avoid or overcome what might be serious damage. Our chief effort therefore should be to produce such plants.

Look for other suggestions next month.

Bulletins — Recent Or Revised

The sources of the following recent or revised bulletins are designated. The bulletins and leaflets may be procured free of charge through these sources:

Bulletin No. 68. "Pests of Ornamentals and Shade Trees," University of Maryland, Extension Service, College Park, Maryland.

Extension Leaflet No. 109. "Pruning Young Fruit Trees," Extension Service, Massachusetts State College, Amherst.

Extension Leaflet No. 144. "Ladino Clover," Massachusetts State College, Amherst.

Extension Leaflet No. 142. "Food Preservation Recipes," Massachusetts State College, Amherst.

Bulletin No. 291. "Two Systems of Feeding Dairy Cows," Massachusetts State College, Amherst.

Make Your Fruit Trees Bear

(Continued from page 1)

Intosh, Macoun, Medina, and Milton have given good results as pollinizers in tests to date.

Most Pear Varieties

are inter-fertile and two different varieties planted together will usually take care of pollination.

Of the cherries, Bing, Lambert, and Napoleon are not only self-sterile but intersterile and should be planted with a good pollinizing variety like Black Republican, Governor Wood, or Black Tartarian. Sour and sweet cherries inter-cross but do not usually flower at the same time and cannot be depended upon for pollination. Sour cherries are usually self-sterile.

Bradshaw, Grand Duke, German Prune and Yellow Egg blossom about the same time and can be depended upon to cross-pollinate. The Japanese varieties of plums are generally self-sterile and need to be interplanted with other varieties. Burbank and Abundance are inter-fertile and the pollen will pollinize most other varieties.

J. H. Hale is the only common self-sterile peach variety and it is easily pollinized by other common varieties.

One pollinizing tree for every eight to twelve of the main crop should be enough in commercial plantings. In bearing trees top-grafting is a satisfactory way to supply a pollinizing variety in a short time. Or, as a temporary proposition, a bouquet consisting of branches of suitable varieties placed in a pail of water in the head of a tree during the blossom period, may be relied upon to supply the necessary pollen.

Wild Greens As Spring Tonic

Wild greens which are now pushing their way up to sunlight to announce the arrival of spring, are an excellent spring tonic.

The list of wild greens is a long one, including dandelion, dock, lamb's quarter, mustard, cowslip, sour dock, water cress and meadow milkweed. All wild greens must be gathered when they are young, since they soon become bitter and tough.

The stalks of milkweed may be cooked like asparagus as soon as they are five or six inches high. When the leaves appear they make good greens, cooked like spinach. If very little water is used in cooking, there will be no temptation to throw away the liquid which contains some of the minerals and vitamins.

Water cress, with a French dressing, either alone or mixed with other greens, makes a delicious salad. Put between thin slices of bread and butter, with a little salt, lemon juice, mayonnaise, or with a mixture of mayonnaise and chopped hard cooked eggs, it is most appetizing.

Radio Health Messages

Sponsored by the Public Education Committee of the Massachusetts Medical Society and the Massachusetts Department of Public Health, the following broadcasts come to their listeners through the courtesy of Station WBZ, on Tuesdays at 4.30 P. M. April 25. Eat That You May Have

Something To Eat With.
May 2. High Blood Pressure.
May 9. Goiter.
May 16. Arteriosclerosis.
May 23. Chronic Bronchitis.
May 30. Neurasthenia.

A State House broadcast sponsored by the Massachusetts Department of Public Health, comes through the station WEEI on Fridays at 12.45 P. M.

Radio Health Forum also broadcasts through station WEEI on Fridays at 4.50 P. M.

Home Grounds Improvement

Professor A. M. Davis, assistant extension horticulturist will hold his first demonstration on Home Grounds Improvement under the auspices of the Essex County Extension Service in Topsfield, May 11.

This is to be the first of a series of meetings in Topsfield, the others to be held on June 8 and July 6.

Similar meetings have been scheduled for May 12, June 9, and July 7 at Essex.

BETTER HOMES DAY JUNE 7

4-H Poultry and Egg Show

The first of its kind, a 4-H poultry and egg show held in Haverhill late in March, drew five thousand spectators the three days it lasted.

Wyandottes, Bantams, Rhode Island Reds, Leghorns, and Barred Plymouth Rocks were among the feathered friends exhibited. To the delight of curiosity seekers, a Turkhen found a prominent place in the exhibit. One club member was heard to say that ten day old chicks scratching around the window held the attention of hundreds. A display of hens', geese, and ducks' eggs was equally popular.

A list of winners in the judging contest held on the final day of the show, follows:

Individuals: John Makroglous, Haverhill, (1st); Proctor Houle, Methuen, (2nd); Frank Corbin, Methuen, (3rd).

Teams: Haverhill, first, consisting of John Makroglous, Mitchell Hyder, Teddy King; Methuen, second, comprised of George Bogannan, Seth Lambert, Ernest Law; West Boxford, third, consisting of John Chadwick, Charles Foster, Roger Deloge.

The success of the affair was largely due to Wendell Stackpole, Alfred Cipolla, and Bryce Ham. These boys were assisted by Ernest A. Howard, agricultural supervisor in Haverhill, and Horace J. Shute, County Club Leader.

It is with regret that we lack space here to print the list of exhibitors who won prizes for birds or eggs.

All prizes, the uses of a display room, lights and all necessary equipment were donated by those many people who are interested in the advancement of agricultural study.

4-H Club Calendar

May 13

County-wide handicraft contest open to handicraft members from every club. Competitors to be judged on articles previously made and one made at contest. Technique to be considered and questionnaire in handicraft work.

May 20

4-H Club Girls' Day. All girls in Home Economics Projects invited to take part. Cake-making and quick bread-making contests. Exhibit of food for food club girls. Annual dress contest for clothing club girls. Parents cordially invited.

May 27

- Yeast bread contest. Winner gets free trip to Camp Gilbert at Amherst.

June 3

4-H Club Field Day. Everyone come.

The above events will all take place at this School. For further information regarding the dates, please write the County Club Agent, Horace J. Shute.

Our Money's Worth

The following project leaders were with Miss May E. Foley, State Nutrition Specialist, at the Hamilton Community House for the third meeting on Our Money's Worth:

Mrs. E. J. Ready, Mrs. W. H. Knowlton, Mrs. Francis Burton, Hamilton; Mrs. E. A. Harding, Mrs. A. B. Mullholland, Mrs. R. L. Hodgkins, Ipswich; Mrs. S. L. Jones, Mrs. J. I. Bouchie, Essex; Mrs. A. G. Olson, Mrs. F. A. Welles, Mrs. Harry Floyd, Manchester; Miss Marion Parker, Mrs. G. S. Day, Mrs. V. D. G. Sanborn, Beverly; Mrs. Elmer Guppy, Mrs. James Pettigell, Mrs. Arvid Molitor, Danvers; Mrs. Edgar Fogg, Mrs. L. K. Parker, South Peabody.

Meats and meat substitutes were discussed by Miss Foley. Under her direction, members prepared the following menu: Potato Pot, Dandelion and Endive Salad with Bacon Dressing, Whole Wheat Bread and Butter, Baked Apple Sauce with Custard.

Food Can Be Safely Left in Tin Cans After Opening

In answer to many inquiries, the Bureau of Home Economics of the United States Department of Agriculture has said repeatedly:

"Food is perfectly safe if left standing in a can under proper conditions of storage after the can is opened. In fact, the can is often the most convenient container in which to keep the food. Food spoils no faster and no slower in the open can than in any other container. You can leave food in the can just as safely as you can leave it in a dish. But of course you have to use the same care to keep it cool and covered."

The bureau explains that some acid foods like fruit and tomatoes, when stored in an open can, do tend to dissolve iron. This may give the food a slightly metallic taste that is not harmful. If the label on the can advises removing the contents as soon as the can is opened, it is because the canners think that an open can, partly filled with food is not attractive in appearance.

Another wrong notion about canned foods is the idea that the liquid in a can of vegetables, like peas or beans, should be drained off and not used. Formerly this liquor was sometimes too salty, but not at present. That juice contains valuable nutrients, and discarding it is a distinct waste.

For the 4th year, Massachusetts apple growers are to have the help of radio in fighting apple diseases and insects.

Notices prepared by scientists of the Massachusetts State College will be broadcast during the noonday programs of Stations WBZ-WBZA, Boston and Springfield, and WEEI, Boston, starting after April 25.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 14

HATHORNE, MASS., MAY, 1933

NO. 4

Preservation of Asparagus, Greens and Rhubarb

Many people enjoy green vegetables and early fruit, when taken fresh from the home garden or from some nearby local source. Often times we have a surplus of these crops which can be greatly enjoyed during the winter months. All of these products can be successfully canned with their natural flavor if one will only take the pains to follow instructions carefully.

One important fact must be remembered, namely that the canned product is no better than the fresh source of material. Poor quality vegetables or fruits will not be any better after they enter the container than they were in the fresh state. Canning does not improve flavor and quality of fruits and vegetables, but does, when properly done, preserve these characteristics as they existed in the natural state. Therefore only fresh, fully ripe (not overripe) fruits and fresh, young, tender vegetables free from insect and disease damage should be used for canning.

One of the most popular green vegetables which we all enjoy during the present season is asparagus.

Asparagus
should be young and tender and since it deteriorates rapidly it should be canned as soon after harvesting as possible. This vegetable is canned either whole or in pieces according to the taste of the consumer or the use for which it is intended. Asparagus from fields that have recently been limed or that have had sulphur dust applied should not be used for canning.

One of the most attractive of all greens results when the tender beets not greater than 1-2 inch in diameter are left attached to the tops. Such greens may be obtained in abundance by sowing the beets quite thick and thinning them when of proper size. The beets are so young and tender they require no special preparation other than a thorough washing. The entire plant is blanched as in canning any green.

Rhubarb can be canned in pieces or

(Continued on page 4)

4-H Club Camp June 23-30

by
Horace J. Shute

What a thrill goes up the spine of every former camper when he reads the announcement of our 1933 camp. This camp is just the place to meet



the best sports in the world and to make lasting friendships with them. And there, young people learn to love the glory of Mother Nature.

Who wouldn't like to get up in the morning with the call of a bugle and enjoy the fun and pep of hiking, playing, studying nature, swimming, developing hobbies, singing, and last but not least that everlasting thrill of camp fires.

Location

The camp will be located at the same beautiful spot it was last year: the Happy Health Camp in Boxford.

Eligibility

Any 4-H club member who has received his first year pin is eligible to attend this camp on the recommendation of the local leader.

Safety

The camp staff includes a trained nurse at all times, and a doctor is on call. We strongly recommend that all campers bring a doctor's certificate with them.

Camp Activities

Our camp program this year will include nature lores, for broadening the scope and education of the campers. Recreation will be supervised by a trained leader and sportsmanship is to be emphasized. Swimming is one of the greatest activities of the camp. If you don't know how to swim this is the place to learn. A staff of swimming councillors will be in charge of all water front activities. Camp cookery and over night hikes will be new features of the camp this year which will add greatly to the

(Continued on page 4)

Gladiolus Thrips

H. Linwood White

The September (1932) issue of this paper carried directions for the treatment with naphthalene flakes of Gladiolus corms in storage for the eradication of the gladiolus thrips (*Taeniothrips gladiolus*).

This treatment has proven entirely dependable, safe, and inexpensive, and is recommended where small quantities are involved.

Where naphthalene flakes were not used before planting, dipping has been necessary to clear the corms of thrips. The most practical and effective dip is

perhaps a solution of one ounce of corrosive sublimate in 7 1-2 gallons of water. The corms are soaked in the solution for five hours and then planted. This treatment is superior to the naphthalene, in that it controls dry rot, hard rot, and scab, as well as thrips.

By the time this issue is distributed most gladiolus will have been planted and many will be showing their leaf tips. Growth from thrip-free corms can be protected from external infestation by spraying the ground and the leaf-tips as soon as any tips appear with the following mixture: Paris green, small quantity; 1 rounded tablespoon; large quantity: 2 pounds; brown sugar, small quantity: 2 pounds, large: 66 pounds; water, small quantity: 3 gallons; large quantity: 100 gallons. Keep the mixture well stirred while applying and cover both surfaces of all foliage and stems, and the ground along the rows. This mixture is a bait not a contact poison. Repeat at weekly intervals as long as any thrips appear on the plants. And since thrips secrete themselves in the leaf sheaths sharp examinations must be made. Other species of thrips attack Gladiolus but the true Gladiolus thrips may be distinguished by the broad cream-colored band across the middle of the otherwise black or dark brown body.

Unless the corms were treated before planting, summer sprays are not as effective since the thrips that overwinter on the corms are more likely

(Continued on page 2)

Essex Farmer and Homemaker

HATHORNE, MASS.

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Calendar

June 3—4-H Club Field Day—at this School.

June 7—Better Homes Day—at this School.

HOMEMAKING DEPARTMENT

JUNE 21

PARENTS' DAY

11 A. M. — 3.30 P. M.

All parents and friends invited

F. F. A. Pilgrimage To Washington

On June 12, 13, and 14, a pilgrimage to Washington, Monticello, and Mt. Vernon is being anticipated by the Future Farmers of America.

An invitation of the Thomas Jefferson Memorial Foundation has already been accepted by some chapters to dedicate a room in Monticello to the ideals of the Future Farmers of America.

All members of the Essex Chapter of the Association who desire a thrilling, but inexpensive trip to Washington on the dates specified are asked to communicate with Instructor J. E. Eastwood.

GLADILOUS THRIPS

(Continued from page 1)

to feed within the leaf sheaths than are those which attack the plants from without. Therefore, neither treatment of corns nor spraying of plants can be considered as effective as both treatments in season.

Essex Student Wins Essay Contest Prize

In a contest open to all vocational agricultural students in the country, a Massachusetts, Essex County boy was awarded the first prize of \$125. He is Alfred Cipolla of Haverhill, a student of this School, a member of the 4-H Club and Vice president of the Essex Chapter of the Future Farmers of America Association.

His winning essay, "Feeding the World" explains how Swift and Company collects raw products from the great agricultural sections and prepares them for the consumer in all parts of the world.

The story of the prize winner is as illuminating as the essay itself. By dint of hard work he has been able to pay his way through school since 1929. At the same time he has kept a high scholarship and has been on competing and oftentimes winning judging teams. He is a member of the School orchestra and has entered the annual public speaking contests sponsored by the Future Farmers of America.

By winning the Swift Essay Contest prize he has reflected credit upon himself, his teachers and his School.

Chemical Tree Bands Kill Tree Worms by Thousands

Chemically treated bands may kill as many as a thousand codling moth worms to the tree each season.

When they leave the fruit, from the middle of June until the end of the season, codling moths seek the nearest dark, protected place for spinning their cocoons. Loose bark on the trunk and branches, or debris on the ground, normally provides suitable quarters. If the trees have been scraped and the orchard thoroughly cleaned up, however, bands around the trunk of the tree will attract 50 per cent or more of the worms. A chemically treated band automatically kills practically all the worms that spin their cocoons in contact with it.

A 2-inch corrugated paper band treated with a mixture of betanaphthol (1 pound) and lubricating oil (1½ pints) is recommended by Government entomologists. Detailed directions for preparing the bands and putting them in place are sent on request by the Bureau of Entomology, United States Department of Agriculture, Washington, D. C.

Chemically treated bands, the entomologists point out, cut down the worm population of an orchard, thus reducing the number to be controlled by spray.

4-H CLUB FIELD DAY

SATURDAY

JUNE 3

Number of Summer Projects Increasing

It is encouraging to note that a greater percentage of agricultural students have found summer employment than was recorded during the same season last year.

Students in the homemaking department anticipate similar success at the close of their final term in June. A few have already received appointments in tea rooms and private homes.

Alumni Note

David Henderson, class of 1930, is operating a poultry project of his own on Andover St., Andover. He has five hundred hens.

Honor Roll

Sixty-five of the two hundred and eighteen agricultural students attained averages of honor roll quality for the last term. These are:

Seniors: Raymond Alley, Lynn; Nathan Clark, Swampscott; Hyman Weinstein, Salem; Alfred Cipolla, Haverhill; Albert Doggart, Lawrence; Fred Anderson, Robert Bartlett, Beverly; Arthur Bulgarias, Byfield; Lester Dixon, Andover; Michael Pickowicz, Billerica; George Sowyrda, Saugus.

Juniors: Dana Drew, Fred Basile, James Gardella, Haverhill; Ralph Broughton, George Mosse, Robert Wolcott, Peabody; John Lynch, Alfred Webb, Andover; Franklin Edwards, Joseph Desmond, Virginia Larrabee, Beverly; Benjamin Gregory, Revere; Kenneth Nunan, Dora Winchester, Albert Nunan, Saugus; Kenneth Nolan, Danvers; Chester Ellis, Gilbert Weed, Alfred Caproni, Lynn; Edward Glowacki, Henry Richardson, Lawrence; Howard Stultz, Ipswich, Bertram Jackson, Salem; Thomas Swinarski, West Peabody; Francis Brown, Amesbury; Edward Brown, Swampscott.

Sophomores: Philip Hamson, Lynn; Walter Licht, Lawrence; Joseph Andreas, Donald Henderson, Beverly; William Daly, Peabody; Gilbert Wallace, Forrest Haynes, Haverhill; John Monroe, Andover; Howard Champion, Rene Deloge, North Andover.

2X-2Y Group: Ruth Fairweather, Raymond Ouellette, Andover; Ernest Thayer, Frank Baczewski, Huntington Howard, Joseph Spakas, Lynn; Elizabeth Crosby, Swampscott; Vincent Nelson, Salem; James Goodale, Middleton; Victor Pohju, Peabody; Franklin Day, Haverhill; Allen Morse, North Andover.

Freshmen: Clinton Spencer, Lionel Sheppard, Ipswich; John Stepanchuk, Haverhill; Roger Wheaton, Manchester; Chester Bucek, Salem; Lorin Clark, Merrimacport.

Effective Bean Beetle Control

James Gallant, Instructor

The Mexican Bean Beetle introduced itself into Essex County last year and caused considerable damage to the county bean crop. It is a first cousin of the beneficial ladybird beetle but is easily distinguished by the eight small, black spots on each wing cover. The yellow spiny larvae usually feed on the under side of the foliage, skeletonizing the leaves as they proceed in their feeding. This pest enjoys our climate and will do serious damage unless it is checked. If certain cultural practices are combined with the proper use of insecticides, beetle and larvae injury may be avoided.

To provide adequate cultural control the

beans should be thinned to 3-5 inches in the row, liberally fertilized and thoroughly cultivated. These practices will promote rapid growth and hasten early maturity. Accordingly the growing period will be shortened and plants will be exposed to injury for a shorter period.

Thinning bean plants is not generally practiced but Homer C. Thompson of Cornell states in his splendid text: "Spacing four to six inches apart would give better results with most garden varieties."

Spraying apparently does a more thorough job of control than dusting but regardless of the method used, effectiveness is largely dependent upon the construction of the spraying or dusting outfit. A sturdy outfit so suited as to permit the insecticides to cover the under foliage is undeniably essential.

Insecticide Materials

1. Spray: Magnesium arsenate, three pounds; Casein lime, two pounds; Water, 100 gallons.

2. Dust: Magnesium arsenate, one pound; Hydrated lime, five pounds; or Barium Fluosilicate, one pound; Hydrated lime, five pounds.

In the application of the insecticide keep in mind these five important aids:

1. There are two broods. Spray or dust as soon as they appear. Watch after June 20.

2. Apply to the under side of the leaves.

3. Cover the entire surface.

4. Spray or dust before the injury is severe. Afterwards it is too late.

5. The insecticides mentioned above should not be used after the pods are half grown unless the beans are washed before marketing. A pyrethrum soap mixture may be used instead.

Further information may be obtained in leaflet form by writing to the Extension Department.

Control of Garden Insects and Diseases

Instructor A. L. Dacy

Use of the wrong material is one of the main reasons for failure in crop pest control. Before buying any of the many proprietary brands on the market therefore, we should know (1) whether we are fighting a chewing insect, a sucking insect or a disease, and (2) which of these three pests is the material in question designed to control.

For example, the standard remedies for chewing insects are either lead or calcium arsenate; for sucking insects nicotine sulphate and for most foliage diseases, some form of copper sulphate. While these may at times be combined to advantage, failure is practically sure to result if one is substituted for another.

The above named materials may be used in either dust or spray form. While perhaps not quite as effective as spraying, dusting is easier and more convenient. An efficient little duster may be bought for as low as \$75.

One pound each of calcium arsenate, nicotine and copper-lime dusts will usually be enough to take care of the common insect and disease pests of the home garden economically and effectively for one season if applied promptly and thoroughly at the first indication of trouble. Extension Leaflet 116 published by the Extension Service, Massachusetts State College, Amherst, gives detailed directions for the control of vegetable crop pests. A copy will be mailed free upon request.

REMEMBER
FARM AND HOME WEEK
JULY 25-26-27-28
MASS. STATE COLLEGE
AMHERST

Bulletins — Recent or Revised

The following bulletins and leaflets are new or revised, and may be had for the asking if applied for at the addresses listed:

Extension Leaflet No. 20, "Potato Growing in Massachusetts," Massachusetts State College, Amherst.

Bulletin No. 294, "Recreational and Forestry Uses of Land in Massachusetts," Massachusetts State College Experiment Station, Amherst.

Technical Bulletin No. 274, "Hot Water as an Insecticide for the Japanese Beetle, and its Effect on the Roots of Nursery Plants," United States Department of Agriculture, Washington, D. C.

Extension Leaflet No. 29, "Strawberry Growing in Massachusetts," Massachusetts State College, Amherst.

Extension Leaflet No. 103, "Success with House Plants," Massachusetts State College, Amherst.

Seen in "Featheredfax"

1. Poultrymen are recommending 250-300 chicks as being the optimum number to brood in a single unit.

2. Wire porches are fading out of the list of brooding equipment.

3. The hot room type batteries are definitely out of the picture, except for hold overs in connection with hatcheries.

4. Suggestions for coccidiosis control are: brooding in small units, getting the chicks out on the ground as early as possible and maintaining absolute dryness in the house.

5. Colony house brooding is coming back.

At an alfalfa demonstration, T. A. Thomas of Salisbury showed a remarkable contrast in production from a field containing no potash in the soil, and one in which six hundred pounds of potash had been used.

WEATHER SUMMARY

January — April 1933

	Jan.	Feb.	Mar.	Apr.
Maximum temperature	56.	54.	53.	74.
Minimum temperature	6.	5.	8.	24.
Mean daily temperature	33.9	30.7	33.2	43.7
Five year average ('28-'32)	28.4	27.0	35.4	44.9
Greatest daily range	28.	35.	26.	35.
Least daily range	4.	6.	3.	3.
Precipitations	2.37"	4.04"	6.30	7.52"
Five year average ('28-'32)	3.23"	3.04"	3.55"	3.82"
Excess for year to date	-.86"	.14"	2.89"	6.59"
Average relative humidity (S. A. M.)	75.7	75.5	76.4	81.4
No. days rain fell	8.	11.	11.	12.
Clear days	14.	11.	11.	8.
Partly cloudy days	8.	9.	6.	7.
Cloudy days	9.	8.	14.	15.
Total hours sunshine	157.5	153.5	158.	160.
Five year average ('28-'32)	146.1	148.8	187.4	211.5
Per cent sunshine	53.6	51.9	42.6	39.9
Snowfall	2."	25."	11."	8."
Five year average ('28-'32)	8.4"	13."	5.5"	1.8"

BETTER HOMES DAY
WEDNESDAY
JUNE 7

Annual Business Meeting Women's Extension Department

Members of the advisory council, community Extension committees, and project leaders met at their tenth annual business meeting on May 9.

Following reports of the past year's accomplishments, of which there have been many along hygiene, nutrition, clothing, and home nursing lines, Miss Virginia Larrabee, a student at the Essex County Agricultural School, explained the principles of flower arrangement.

The guest speaker, Dr. Helen I. D. McGillicuddy, of the State Society for Social Hygiene, discussed the problems of the adolescent boy and girl.

After a luncheon served by students in the homemaking department, Miss Verna Payson of the State Department of Education, explained what the State is doing for vocational education. Low cost meals, clothing, and hygiene are among the projects being stressed this year.

Mrs. Annette T. Herr, State Home Demonstration Leader, explained the homemaker of Essex County to take advantage of the opportunities offered her through Extension Services, individually and as a community. It is Mrs. Herr's opinion that education and not balancing the budget is what the country needs.

In closing the meeting, Mrs. Mary M. McIntire, Home Demonstration Agent, summarized the program of the County Extension Service and announced the projects which will be stressed during the year 1933-34.

Round About The County

The last nutrition meeting for project leaders under the direction of May E. Foley, State Nutrition Specialist, was held in the Hamilton Community house on May 2. Twenty-two project leaders reported at this meeting.

Leaders from Danvers and South Peabody report a second group already started in their communities.

Three communities, West Newbury, South Groveland, and West Lynn, are now carrying on the New Clothes from Old Project.

Home Nursing classes under the supervision of Mrs. Mary E. Roundy, R. N., Home Nursing Instructor, are being held in Amesbury, Lawrence, West Gloucester, and Beverly.

Better Homes Day

Homemakers in Essex County may look forward to an exceptional program on Better Homes Day, Wednesday, June 7.

The morning speaker is to be Mrs. Kenneth W. Forman whose subject will include experiences in India.

In the afternoon, Dr. Cheney Jones of the Little Wanderers Home, Brookline, will be the guest speaker. He has chosen for his subject, "The Art of Living with our Children."

Following Dr. Jones' address, Mrs. L. L. Davis of Hopedale, Massachusetts, leader in Worcester County, will relate the type of work accomplished in children's clothing in Worcester County.

Plan to come in the morning and stay all day. The School campus will welcome those who bring picnic lunches. Children will be cared for by students of the homemaking department.

Question and Answer Column

Conducted by May E. Foley,
Extension Nutritionist

Question: "Are any vegetables prohibited for a person who must lose weight?"

Answer: The only vegetables which in their natural state are at all fattening are dried peas and beans and potatoes. Of course any vegetable can be made fattening by adding quantities of butter, cream, milk or mayonnaise dressing. We recommend a potato a day for persons who are reducing because of the high mineral content of this vegetable, but we do suggest that no bread be eaten at the same meal with potatoes. Bread, pastries, sweets of all kinds and fats must be used sparingly in a reducing diet. We recommend at least two servings of vegetables daily besides potatoes, one of which should be green or raw. It is well also to serve a yellow vegetable several times weekly.

Question: "Would two servings of the same vegetable answer for two servings?"

It is perfectly all right to take two servings of the same vegetable. A serving is at least half a cup.

Where Are The Nodules?

In Bulletin No. 421 of the Wisconsin Experiment Station, on page 90, occurs this statement:

"Substantiation was secured for the statement made in an earlier report, namely, that strains of bacteria on plants (legumes), when in an effective condition induce the formation of a small number of large nodules located at or near the top of the primary root; when the strains are not effective, they induce the formation of many small nodules but widely distributed over the root system."

BETTER HOMES DAY

WEDNESDAY

JUNE 7

4-H Club Camp

(Continued from page 1)

fun of real open air campers. Hobbies have always been carried out with great enthusiasm. Club members will again have an opportunity to make attractive and useful articles. Each member will have a choice of several hobbies.

So far, not much has been said of the vast friendships made during this week of camp life. Nor of the picnics! What fun it is going to be when we go "Snipe Hunting" again.

Nor must the Camp Log be forgotten. This is the official camp organ and it is popular! Everybody has an article in it and everybody has something about him in it. The cartoons and witty sayings can't be equalled.

Just imagine a solid week of camping with these features and many others too numerous to mention, for a fee of only \$5.00 per camper.

Club members interested must get in touch with their local leaders immediately and make out applications for this third annual 4-H club camp in Essex County.

For further particulars write to the Camp Director, H. J. Shute, County Club Agent, Hathorne, Mass.

Attention Dairymen

Professor J. H. Frandsen of the Massachusetts State College calls attention to a practice on certain dairy farms, presumably to hold down expenses where electric cooling units are used, of not keeping the tank full of water when it contains only half capacity load of milk cans.

Experiments were planned whereby the temperature and samples for bacterial analysis of milk in all cans were carefully taken—above the water line, at the water line, and near the bottom of the cans, as well as of the ice water in which the cans were immersed. Tests were made using a tank without agitator and also one with agitator. The results indicated that the water in the tank should be as high as the milk line. This can be accomplished by the addition of more water to make up for the absence of some cans or by providing some arrangement whereby weighted empty cans may be placed in the tank so as to raise the water line to the height of the milk in the cans.

ASPARAGUS PRESERVATION

(Continued from page 1)

as a sauce. When young and tender the outer skin should not be removed.

Complete directions for canning the above produce may be found in the "Massachusetts Extension Leaflet No. 13", which may be had for the asking.
C. O. Cartwright.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 14

HATHORNE, MASS., JUNE, 1933

NO. 5

Fruit Nursery Notes

The fruit bloom on the new varieties of fruit has been unusually heavy this year. We are wondering if our garden lovers fully appreciate the extreme beauty of the fruit bearing trees and wonder if they are appreciated and planted as they should be for that purpose alone. The bloom on the cherries, peaches, nectarines and plums was unusually heavy and even though we experienced cold nights with a few light frosts the daytime conditions were most favorable and insect life was at its best. As a result most varieties are carrying an unusual "set" of fruit.

The season has now advanced far enough that it is possible to comment on new varieties.

Among the strawberries an unnamed variety, No. 4435, is again demonstrating its superiority for vigor of plant, size and heavy set of fruit, and superb mild flavor. The School may be able this year to help out some commercial growers and some amateurs with potted plants in August at a very reasonable price. The variety is destined, we believe, to be of great value for the home table, roadside stand, and nearby market use.

Among the sweet cherries

the new extra early variety named Seneca has again been outstanding. A good sized, high quality fruit fully ripe on June 20 makes it a variety worth noting. We strongly urge the planting of two varieties, however, for the benefit of cross pollinization, since the sweet cherry seems to be outstandingly self sterile. We again wish to point out the futility of attempting to grow cherries with the bird problem as it is, unless the grower has planned to resort to tents or other devices for the sake of securing the crop.

The blueberries,

of which the School maintains a testing ground of the nine newest named varieties, are making an exceptional showing. The fruit at this writing (June 24) now more than half-size, is very large and extremely abundant.

Peaches, nectarines, and plums are in very heavy set and interested parties should be keen to study these varieties. A guide will be furnished and the fruit lovers are very welcome.

Drink More Milk

According to nutrition specialists, milk is considered one of our most nearly perfect foods and may be used as the basis of many nourishing and



appetizing dishes. It is rich in vitamins and minerals, besides being a meat substitute.

Little Lottie, aged four, who was spending a week with her aunt in the country had developed a great fondness for milk. One day, having drunk as much milk as her aunt thought good for her, she was informed that she could not have any more.

"Pshaw" exclaimed the indignant little miss, "I don't see why you want to be so stingy with your old milk. There's two whole cowfuls out in the barn."

Calcium Chlorate Controls Poison Ivy

According to O. C. Roberts, Instructor in Pomology at Massachusetts State College, sections of poison ivy in pine hedges and around apple trees were sprayed last year with a solution of calcium chlorate. The results were so exceedingly satisfactory, extensive use of calcium chlorate will be made this season at the college.

For a specific explanation of the use of this material, anyone interested may refer to the County Agent F. C. Smith at the Essex County Agricultural School, Hathorne.

Apple Maggot Control

On account of the severe infestation last year, the following control measures are suggested for this year's control:

(1) Cut down all apple trees which cannot be adequately sprayed.

(2) Spray as follows: About July 10, when the flies appear, use two pounds calcium arsenate to one hundred gallons water, with a mild sulphur fungicide if necessary. (Because of the danger of spray residue calcium arsenate is suggested as a substitute for arsenate of lead. Spray again July 25 using the same spray materials.

If dust is preferred, make three applications at ten-day intervals beginning about July 10, using ninety parts hydrated lime and ten parts arsenate of lead. (Fruit dusted according to the recommended schedule is likely to be within the tolerance as regards Lead Residue. For this reason growers equipped with dusters find less need for the substitution of calcium arsenate.)

(3) Spray or dust all apple trees within two hundred yards of the orchard whether bearing

or not.

(4) Collect and dispose of "drop apples" weekly after July 20. Infested fruit may be safely dumped on ground thoroughly saturated with crankcase oil, or placed in barrels containing a little oil.

Notes On the New Farm Act

It is impossible to give farmers any very accurate idea as to their eligibility for a farm loan under the Emergency Credit Provision of the new Farm Act. No specific ruling has been made on important details. At the present time the only suggestion which can be made is that no loans which can be obtained through the regular land bank channel will be made through the agent of the loan commission. In other words if funds are not available to a farmer through the land bank channels he can use the emergency service.

There are two types of loans: the regular first mortgage loan at 4½ per cent interest, and a second mortgage loan at 5 per cent.

Those who desire loans should apply for them through the Secretary-Treasurer of the Essex County Farm

(Continued on page 3)

Essex Farmer and Homemaker

HATHORNE, MASS.
Published Monthly by the Trustees of
the Essex County Agricultural School

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Calendar

- June 21—Parents' Day—Homemaking Department.
- June 23—End of School term in homemaking department.
- June 23-29—4-H Camp at Boxford.
- June 25—Deep Sea Fishing Trip for Instructors.
- July 17-August 8—State 4-H Camp at Amherst.
- July 25-26-27-28—Farm and Home Week, M. S. C., Amherst.
- August 2—Waltham Market Garden Field Station Outing.
- August 7-9—Agricultural Instructors' Conference, Bristol County Agricultural School.
- September 5—School Reopens.
- September 6-7-8-9—Topsfield Fair.

Homemaking Notes

As the girls in the homemaking department approach the end of their school term, many have already found projects for summer occupation. Wilma Corliss, of Andover, Marion Bell, Methuen, Clara Robinson, Beverly, and Helen Wood, Swampscott, each have positions as household assistants in the county; and Elizabeth Akerly of Beverly is employed at the new Red Feather Tea Room in Salisbury.

REMEMBER
FARM AND HOME WEEK
JULY 25-26-27-28
MASS. STATE COLLEGE
AMHERST

Alumni Notes

Alice Dalton, class of 1930, and now a student of the Boston School of Occupational Training, is doing practice work at the Danvers State Hospital.

Angelene Jennicks, a graduate of the class of 1931, is in training at the Beverly hospital.

E. G. Merrill, Jr., a student in the School's first class in 1913, recently sent greetings from San Diego, California, where he is assistant treasurer and assistant trust officer of the Union Trust Company.

Married: In Salem, June 17, at 2 Chestnut St., by Reverend Carl H. Kopf, Roland R. Daggett of Rockport, class of 1930, son of Mr. and Mrs. William Daggett, and Marjorie G. Root of Salem, daughter of Mr. and Mrs. Arthur M. Root.

William W. Belcher

The many friends of Mr. Belcher were shocked to learn of his sudden and untimely death on Saturday, May 27. Sick for only a few short days, it seems impossible to imagine that one of such apparently good health has passed so suddenly.

During a period of twelve years, representing the time during which the School has grown most rapidly, Mr. Belcher served the School in the capacity of Business Manager and rendered most valuable service. From his previous training and ready adaptability he seemed to lend himself in full capacity to this type of work.

We of the staff who knew him most intimately are still left in a dazed condition over this break in our organization.

Agriculture and Industry

A graphic exhibit of the close relation between agriculture and industry in Massachusetts will be shown at the Eastern States Exposition in Springfield next September.

With each exhibit there will be an explanation of the value of the industry, investments, and labor employed, which will give to visitors a comprehensive idea of the industrial resources of the State. On top of the exhibition cases will be placed fruit, vegetables, and other agricultural products which are raised in Massachusetts to feed the workers who make the industrial products exhibited below.

Dr. A. W. Gilbert, Commissioner of Agriculture, is developing these plans with the cooperation of industrial leaders.

The entire exhibit is to be strictly educational in its nature and will not be made use of to advertise any particular product.

Arnold Bennett, the late great English writer, was once asked to name his chief hobby. "Just being interested," was his reply.

F. F. A. Pilgrimage to Washington

By

E. Hartwell Daley, Student

Two instructors and three students of this School recently attended the first National Pilgrimage of the Future Farmers of America to the Nation's Capitol, Mount Vernon, and Monticello. The trip was very educational and enjoyable and was an event which will always be remembered. There were about 550 boys representing thirty-three different states and the territory of Hawaii.

On the first day of the convention the delegates marched to the White House where they were addressed by President Roosevelt. On the afternoon of the first day, a trip was made to Arlington and Mount Vernon. The tombs of George Washington and the Unknown Soldier were decorated. The following afternoon visits to Congress, the Capitol building, Washington Monument, and the Smithsonian Institute were very profitable. The final day was spent at Monticello, the home of Thomas Jefferson, where a room was dedicated to the ideals of the Future Farmers. The dedication exercises were broadcast over forty-five stations of the N. B. C. One interesting part of the ceremony was the presentation, by the official delegations, of a product typical of each state. Our state presented cranberries as we raise eighty per cent of the cranberries used.

It is interesting to note that the delegation from our School was the only delegation from New England. We returned to Massachusetts feeling that our time had been well spent and that our future hopes in agriculture will not be in vain.

The delegation from this school was made up of Instructors J. E. Eastwood and G. E. Gifford, and Students Chester Ellis of Lynn, Chester Dunn of Rowley, and E. Hartwell Daley of Salem.

Parents Day

"Parents Day", an annual observance in the homemaking department, had an unusually large attendance of 200 this year.

The guest speaker was Miss Alice Haley of the Garland School, Boston, and President of the New England Home Economics Association. She stressed the need of adjustment in the modern home. Believing in avocations, Miss Haley listed cases where a hobby has provided satisfactory employment when regular work has failed.

During the morning program, red cross certificates were presented by Edward J. Mulry to those students who had earned them.

Features of the afternoon program included a dress parade and foods demonstrations.

Prepare Special Seed Bed For Alfalfa

It is a reasonable bet that 10 out of every dozen men preparing a seed bed for alfalfa, for the first time, will do either one or both of two important steps wrong.

The first step is: Not to plant on a deep mellow seed bed. If plowed or disked deeply a month or so should elapse to allow time for settling. A packed soil firm beneath is needed to facilitate a constant and adequate supply of moisture upward to grow the seedlings unless timely rains descend.

The second step is: To clear surface soil of weeds. Planting too quickly after deep cultivation simply invites a crop of weeds in place of alfalfa. Loose deep cultivation merely brings to the surface a new flock of half germinated weeds to provide a "flying start" over the slower growing alfalfa. And, most weeds don't need a "flying start" to win.

Farmers in the County, have found it good practice to have a firm seed bed for their midsummer seedlings of alfalfa. After lime has been thoroughly disked in, they switch to smoothing harrows for several weeks at least to allow the soil to settle, only scratching the surface soil enough to destroy several crops of germinating weeds previous to sowing the alfalfa the latter part of July or first week of August.

Those who are planning a midsummer seeding this year will find much practical information in a new Extension Leaflet No. 9 "Alfalfa for Massachusetts" which is available at the County Extension Office.

Ralph Donaldson,
Extension Agronomist.

New Official Records for Essex County Cattle

Two cows in the herd of S. M. Merrill of Ipswich have recently finished their official records for production which entitle them to entry in the Advanced Register of the American Guernsey Cattle Club. These animals include four year old Argilla May Lena 251189 with a production of 10,931.8 pounds of milk and 763.6 pounds of fat in class B; two year old Argilla Sensation 303090 with a production of 8691.1 pounds of milk and 492.0 pounds of fat in class G.

Control of Rose Chafer

This year the Rose bugs (Chafer) are very plentiful. County Agent Francis Smith recently found them defoliating apple trees and even eating holes in the small apples.

To control use two pounds of calcium arsenate and two gallons of molasses to one hundred gallons of spray mixture.

Improved Pasture Pays

Improved pastures are a cheap source of feed for stock. A farmer in New Hampshire, cooperating with his county agent top-dressed his five acres of pasture with five hundred pounds of complete fertilizer at a cost of \$75, reports the United States Department of Agriculture. After four weeks he turned the cows on this pasture. Tests made during the six weeks the cows grazed there there showed that his herd produced 7,000 pounds more milk than they did in the same period the previous year, although the farmer had one cow fewer and fed 800 pounds less grain. Based on current expenses he made \$189 on the extra milk and saved \$16 on the grain, netting an increase in income of \$120.

Local Producers To Take Active Part On M. S. C. Programs

Fourteen programs with 84 speakers, many of whom are local producers, are listed for the annual Farm and Home Week programs to be held at the Massachusetts State College during the four days, July 25, 26, 27, and 28. During these four days the State College is going to place before the farmers who go to Amherst many facts that can be used in making the farm a better paying proposition. Changes which are taking place in agriculture and how they may be met to the best advantage might be called the keynote of these programs.

There are eight programs which are of particular interest to the practical farmer: fruit, poultry, dairy cattle, tobacco and onions, farm management, forestry, beekeeping, and commercial vegetables. Other programs scheduled are home gardens, floriculture, and lawns, and two programs strictly for the women, one on food conservation and the other on general topics.

G. F. Warren, economist from Cornell University, who proved so popular last year, will again give two talks, one to the general assembly so that all farmers will have an opportunity to hear him and the other to be presented on the poultry program. Mordecai Ezekiel, who is economic adviser to the United States Secretary of Agriculture Henry Wallace, will be here to tell New England farmers how they may profit through the new Farm Act. These are only two of the outstanding speakers.

NEW FARM ACT

(Continued from page 1)

Loan Committee: Mr. Robert Metcalf, 53 Merrimac St., Haverhill.

It the process of filling out application blanks is not clear to anyone desirous of a loan, the County Agent F. C. Smith will be glad to assist in clarifying the same.

Of Interest to Housewives and Potato Growers

Golden is the name given to a new type of yellow-fleshed potatoes. This seedling has resulted from various matings, which included an unnamed kind of yellow-fleshed tubers native of South America. Golden is reported to be an exceptionally high yielding variety which excelled all varieties with which it was tested during the seasons of 1931 and 1932 at the Presque Isle station. For the two-year average, Golden yielded 130 bushels per acre more than Green Mountain. Its tubers are a dark cream buff color, smooth with medium shallow eyes. And, according to C. F. Clark, William Stuart, and F. J. Stevenson of the U. S. D. A. in charge of this potato investigational work, the Golden ranked highest of five varieties in cooking quality and has the further merit of containing Vitamin A. Golden is also being tested out in various states, including Massachusetts. The U. S. D. A. has no seed yet available for distribution to individual growers.

Fruit growers frequently find that when they thin the apples on a tree, removing as many as half or two-thirds of the apples, during June or early July, the total crop is greater than if the fruit had not been thinned.

During hot, dry weather, lawns should not be watered unless water is necessary, and then should receive a thorough soaking. A soaking once a week is better than a light sprinkling every day.

Disease Control Notes

Striking improvement in stand of field-sown seed of spinach, carrots and beets has been secured in tests by Amherst by treating the seed with red oxide of copper (Cuprous Oxide.)

Many acres of carrots and spinach will be planted this summer. Red Oxide, which should be shaken up thoroughly with the seed at the rate of 5 ounces for 16 pounds seed, will help to secure a satisfactory stand of plants. It is good insurance, comparatively inexpensive, and can not injure germination.

Newsy Notes

By

The County Agent

John Kohn, Elm Street, Salisbury, planted his rows of strawberries six feet apart and kept the rows fairly open. He has excellent, large-sized berries with no rot, and is getting top prices now.

Caleb Coggs, Coggs, Essex, has tried for many years to grow alfalfa. You should see his field now. Last year he used various fertilizers as topdressing. The manure gave best results. This year he plans to use liquid manure from the cows.

"Time For a Little Something"

Now that picnic weather is really here let's ask all our friends and cousins and aunts to join us in an outdoor banquet!

There is no finer—or saner—way of making revelry, and how good it makes you feel!

A recipe or two supplied by specialists may help you to vary the usual "sandwich picnic."

Here is one for hungry people: Bacon and Eggs on Rocks:

Build fire over flat rock. When burned down well, sweep off and wipe rock with paper napkin. Make a ring from slice of bacon. Place on rock and when bacon has cooked sufficiently to grease rock, break egg in center. Season and cook until done to taste. Eat between bread or toast and butter.

"Kabobs" is also tempting: Cut steak into one inch squares. Put a piece on stick, then small piece of suet, slice of apple, slice of raw onion. Cook over coals until done. Salt.

Individual bread on sticks sounds very fanciful and ought to be fun to make—and more fun to eat:

Fistful of flour (may contain dried milk powder, 2 tablespoons to a cup); pinch of salt (first finger and thumb), baking powder (first two fingers and thumb), fat size of a walnut. Put into a cup. Make hole in center with thumb. Fill with water and mix. Roll about size of forefinger. Twist around stick. Cook over coals. May be filled with scrambled eggs or with jam for dessert.

Canning Demonstrations in Salem

July 13-14

As the result of a conference held on June 16 at this School, July 13 and 14 were set as dates for canning demonstrations to be conducted in Salem by Professor William R. Cole of Massachusetts State College. These will be held in conjunction with the welfare garden work which is being carried on in Salem this year.

Instruction will be given for economical and efficient ways of canning vegetables in season.

Children's Clothing

New Project For Fall

Mrs. Mary M. McIntire, Home Demonstration Agent, recently attended a conference in Concord where Mrs. Esther Cooley Page, State Clothing Specialist, gave instruction for making children's clothing.

Guided by information gained at the conference, Mrs. McIntire will assist Mrs. Page in conducting leaders' meetings during September in the northern, southern, and eastern sections of Essex County.

Better Homes Day

The ninth annual Better Homes' Day, sponsored by Mrs. Mary M. McIntire, Home Demonstration Agent for Essex County, drew nearly two hundred women to the Essex County Agricultural School, June 7.

The program, varying in its features from home life in India to the art of living with our children and a discussion of the Worcester County's children's clothing project, was interspersed with lunch and a recreation hour lead by Horace J. Shute, County Club Agent.

Although living conditions in a Hindu village are drab, as pictured by Mrs. Kenneth W. Forman, a former resident of India, compensation lies in the costumes and profusion of adornments worn by Hindu women. The Hindu's bright skirt is replaced by equally colorful trousers among Mohammedan women.

The educated women of India were described by Mrs. Forman as being patient, far more than we, with a love of simplicity and dignity.

Dr. Cheney Jones, Superintendent of the Home for Little Wanderers in Brookline, was well qualified to suggest that parents try to understand the emotional actions taking place in the minds of their children. To avert fear, confusion, causes for unpleasant memories and resentments, and worries, is one of the secrets of the art of living with our children.

Home nursing, nutrition, and clothing exhibits were an added part of the program which made the day a successful one.

Camp Gilbert

Camp Gilbert in Amherst is again planning its summer activities.

The camp, divided into two sessions, the first of which will open on July 22, and the second on August 1, is open to delegates chosen from each county by the County Club Agents.

Essex County will be represented by clothing, foods, poultry, canning, handicraft, and garden delegates in addition to special delegates under Extension funds.

All delegates must be sixteen years of age or over, who have had at least two years of club work, one of which may have been in leadership.

One hundred and five 4-H club members are now attending the third annual 4-H camp in Boxford which opened on Friday, June 23.

The Home Nursing courses conducted by Mrs. Mary Roundy, R. N., have come to a close. The last meeting was held in Amesbury on June 14.

Professor Arnold M. Davis, of the Massachusetts State College will conclude a series of garden lectures in Essex County on July 6 at Topsfield, and July 7 at Essex.

Hot Weather Foods

A sandwich loaf, particularly a decorated one, is an excellent luncheon or Sunday night supper dish for warm weather. Choose your favorite fillings and go ahead. Cut your whole loaf of bread into three or, if you like, four slices the long way of the loaf after removing all crusts. Then put loaf together with various sandwich fillings. Butter is not necessary on the bread. When whole loaf is piled together again cover the entire loaf with nicely creamed and moistened cheese. The cake decorator with colored cream cheese and a few olives and nuts make the loaf very attractive when brought onto the table whole. Slice and serve. Be sure to choose moist fillings or loaf will seem very dry.

Minced ham, egg salad and cucumbers are three fillings which work together nicely. Fish fillings, possibly a sweet filling or the snappy pickle and relish combinations are also good ones.

It is preferable that the loaf be left to stand before serving in order to get firm. It makes serving much easier.

Choose your own fillings and try out a sandwich loaf some hot day.

Spinach

Raw spinach, if very fresh and tender, makes an excellent substitute for lettuce. Try it and surprise yourself as to how good it really is—and of course it is very nutritious.

Ruth Emerson,
Food Instructor.

Essex Scores in State Dress Contest

By virtue of winning first prizes at the recent State dress contest, two Essex County 4-H club members will be candidates for the National contest to be held in Chicago this fall. They are: Helen Walker of North Andover, first prize winner in the party dress group, and Dorothy Steele of Gloucester, winner of first prize in the street dress contest. Both girls have been in club work for three years.

Breadmaking Contests

Popular This Year

A free trip to Camp Gilbert in Amherst has been awarded to Louise Semple of Gloucester, first prize winner in a 4-H club breadmaking contest held recently at this School.

Second and third prize winners in the contest were May Dodge, also of Gloucester, and Genevieve Bingham, North Andover. Ribbons and special prizes were awarded to these girls.

Two second prize winners at the State breadmaking contest were Essex County members: Anna Marchilli of Beverly, and May Dodge, Gloucester.

ESSEX FARMER AND HOME MAKER

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HATHORNE, MASS., JULY, 1933

NO. 6

Rock Gardens

Rock gardening affords the true plant lover an opportunity to indulge in the cultivation of a group of plants partially or totally unadapted to the soils, exposures, and competitions of the lawn borders of formal garden beds. And, judging from the fevered assemblages of rocks on all sides much indulgence is being enjoyed.

Nearly everyone who has thought much about the matter will agree that Essex County's rocky shores and inland ledges offer wholly natural and appropriate settings for rock gardens. In fact, barring a change of climate, little needs be done, save discover pockets and crevices, deepen, modify, and enrich their soils, lay bare attractive rock surfaces, and plant species that are by nature endowed with a liking for just such situations. All up and down our coastline and throughout our rock-ribbed interior are many excellent rock gardens that fit into their environment as perfectly as though they had always been there.

But, alas, the dwellers of the plains, of the stoneless plateaus, and of the sandy stretches of shoreline, viewing these same rock gardens, suffer an impelling urge to do likewise. Since many of the gardens are the dominant features of their owners' home places, some of the neophytes begin strewing their stones about the middle of the lawn, or along its margins, or about the foundations of the house, or in a conspicuous position at the rear of the house. A rock garden they will have; and let us not censure them. We cannot all live on ledges nor need we do so to have our rock gardens. But let us mold our home grounds to the landscape of our native environment even as we seek to harmonize our dwellings with the contours, colorings, and character of the land itself. Can we not build our rock garden in a corner of our yard—a far corner, say—or against a face of our house where we may gain pleasure from it without marring in the least the homogeneous picture we wish to present to passersby.

I am thinking right now of two rock gardens, so restrained, so intimate, so concealed that only the owners and their guests are privileged to share the full enjoyment of their choice and many-hued inhabitants, and their water-worn, weathered stones. One of these gardens is on the

Future Farmer Jottings

A project tour, proposed for Thursday, August 17, will be sponsored by the Essex Chapter of Future Farmers of America, for the purpose of visiting student summer projects.

An additional visit to the Lawrence welfare gardens will make the tour complete in agricultural value.



RURAL ESSEX COUNTY

The Nanking Cherry

A Most Valuable Shrub

We have been increasingly impressed with the value of the Nanking cherries. (*Prunus Tomentosa*), both as an ornamental and for its fruiting value.

As a flowering plant the beautiful little plum-like blossoms, varying from light pink to cream-white, appear before the foliage, flowering amazingly abundant during the last week of April. These are immediately followed by a beautiful leaf which unfolds in a most attractive manner.

The fruit varies from bright red to a much lighter shade and on some forms is yellow. The fruit has approximately the value of a sour cherry except that it is much smaller and the seeds are rather inconspicuous. We heartily recommend a better acquaintance with this plant. It may be managed as a shrub or trimmed in miniature tree form.

Swampscott lowlands, the other on Lynnfield plain. Neither garden violates the principles of propriety. Both afford deep satisfaction to their designers, builders, and owners.

So this, after all, is not a treatise on rock gardening. It is an appeal to the finer senses of those who love plants, and who would compose more lovely home grounds.

H. Linwood White

Infectious

Laryngotracheitis

(Infectious Bronchitis)
A Word of Warning

There has been much publicity given to the matter of vaccinating poultry against infectious laryngotracheitis, and owing to the success that has been enjoyed by vaccinating against fowl pox, many poultrymen may be tempted to try the former without full knowledge of the facts and factors involved.

(Reasons for Not Vaccinating against Infectious Laryngotracheitis in Essex County:)

1. Commercially we are remarkably free from the disease.
2. Although present in the county for at least five years, it has spread but little in that period.
3. The disease can be controlled and eradicated without vaccination.
4. Vaccination is costly and adds another chore and handling of birds.
5. If birds are vaccinated once, the procedure must be followed yearly, as it introduces the live virus on the plant.
6. Unlike pox, laryngotracheitis is quite likely to occur in summer as well as fall or winter, and therein may involve vaccinating cockerel broilers, or risking losses from disease if not vaccinated prior to marketing.
7. The vaccine is still in the experimental stage, has not always proven effective, and is not endorsed for general use by our state poultry and veterinary departments.

Caution in regard to Infectious Laryngotracheitis

1. Do not buy any started chix or adult birds to introduce into your flock unless you are absolutely sure that they are from this disease. (Birds that recover from the disease are carriers).
2. If you have the disease on your place, or are in doubt about vaccinating for it, get in touch with the Essex County Agricultural School or the State College in regard to control and eradication measures.

J. Stanley Bennet,
Instructor in Poultry.

The United States Department of Agriculture recommends scattering Borax over the damp places in horse stables and between cracks in wooden stable floors to control flies.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION
SUBSCRIPTION 25c PER YEAR

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Eastern Massachusetts Society of Beekeepers
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Secretary, Earl B. Pride, East Lynn

Calendar

July 17-August 8—State 4-H Camp at Amherst.

July 25, 26, 27, 28—Farm and Home Week, Massachusetts State College, Amherst.

August 2—Waltham Market Garden Field Station Outing.

August 7, 9—Agricultural Instructors' Conference, Bristol County Agricultural School.

August 17—F. F. A. Project Tour.

September 5—School Reopens.

September 6, 7, 8, 9—Topsfield Fair.

Tomato Blossom End Rot

Blossom End Rot on tomatoes will soon be found. It is caused by unbalanced plant food and certain improper moisture conditions. Drought brings it on, and under some conditions, too much rainfall may produce the same effect. High temperatures and drying weather which make plants lose more water are even more likely to develop this disease.

Too much nitrogenous and potash fertilizer may bring on the trouble, while the use of superphosphate tends to offset it.

Blossom end rot seldom occurs where humus and moisture conditions are ideal.

C. M. Stearns

F. F. A. Fall Camp

Sunday, September 17, is a date for F. F. A. members to check on their calendars with a bright red bracket. An entire week of camping is in store for them, starting at three o'clock Sunday afternoon. If sports, swimming, crafts, fishing, and evening camp fire meetings don't meet the approval of the campers we are poor guessers.

The recreation committee of the Essex Chapter of F. F. A., is planning programs filled full of camp life and spirit.

The expense will be small and may be paid in half with produce instead of cash. Mr. Eastwood, camp treasurer, will handle the commissary and asks prospective campers to notify him of the provisions they wish to offer, if any.

Don't delay your plans for attending. Project instructors or Mr. Eastwood will be glad to hear from any member who want to be there.

Coach Couhig is to be camp director!

Electricity and Dairy Sanitation

Health authorities, state regulations and competition have forced the question of dairy sanitation upon every dairyman at least in this section of the country. In Massachusetts the new regulations emphasize quick cooling and sterilization. The latter may be had by "boiling water, dry heat, live steam or sodium hypochlorite."

Naturally dairymen who live on roads served by power lines are or should be interested in any equipment that gives the cleanest, most convenient service and at a cost such that it saves labor. This applies particularly to the producer, retailer of milk, who handles a small volume of milk—not enough to warrant buying a steam boiler. The electric water heater fills this need in that it provides hot water for sterilizing at all times, but a dairyman, to use it, must procure low rates. For the dairyman who desires plenty of hot water for sterilizing milk cans, pails, trainers, aerators, bottles, etc., a large tank is practical only if he can secure the "off-peak rate."

It is true, other methods of heating are somewhat cheaper, but convenience, neatness, saving in labor, and elimination of fire risk all appeal to the dairyman.

Electricity is convenient, clean, and efficient. But more farmers must realize that more electricity must be consumed in order to get volume which means low cost per kilowatt hours.

F. C. Emith,
County Agent.

Project Notes

Three of the School's students have been appointed to six months' enlistment in the Civilian Reforestation Units. James Goodale is at the Herbert Parker Forest, Andover. James Neville was sent to Camp Pawtuck-away, New Hampshire, and C. Francis Brown is at Devens.

Letters have been received from Paul Fisher and Fred Anderson, both undergraduates, who have summer projects on a farm in Bridgetown, Nova Scotia.

Edward Glowacki is now employed on the farm of John Soztucinski in Haverhill.

Student Alden Parker of Topsfield has a very fine ownership vegetable garden of over one-half acre. Control of insects and plant diseases by spraying is principally occupying his attention at present. Quite a large area in the garden is given over to mangle beets and winter cabbage to be used by the flock of fine Rhode Island Red pullets which Parker has successfully raised. The pullets show excellent feathering and early maturity. They are now coming into laying rapidly.

Student Frank Corbin is conducting a partnership three-fourths acre potato project at the home of Mr. Shute, County Club Leader. The crop is at the blooming stage, vigorous in growth and of excellent dark green color. The weed problem has been successfully met and a Bordeaux spray program for blight control is under way.

Student Ernest Tarbox of Saugus has one of the outstanding ownership vegetable gardens of the backyard type. His production and crop value per unit will be very high. Every inch of space is being made to work continually. He combines a great deal of ornamental work on the very attractive home grounds with his vegetable garden.

Dunning Assistant To Westervelt

Carroll W. Dunning, of Portland, Oregon, has been appointed executive assistant to Gen. William I. Westervelt, chief of the processing and marketing division of the Agricultural Adjustment Administration.

Mr. Dunning was with the Department of Agriculture for 6 years before the war, for 3 years a marketing specialist in the Bureau of Agricultural Economics. During the war he served overseas with the rank of major. In 1920 he was assistant to the general sales manager of the Ford Motor Co., specializing in the development of agricultural tractor sales in the United States and in 1926-1930 he was sales manager and assistant general manager of the same organization in Germany and Central Europe. Recently, he has been associated with the Department of Commerce, specializing in marketing surveys, with office in New York City.

FARM AND HOME WEEK
AMHERST

JULY 25, 26, 27, 28

Revised Lead Tolerance Helps Apple Grower

A new ruling by the authorities in Washington places the Lead Tolerance for the 1933 crop at .02 grain per pound of fruit instead of .014 grain per pound as previously announced. Following is an extract from a letter written by Henry A. Wallace on June 20, 1933:

"A wide survey in fruit producing areas has indicated that a schedule of spraying adequate to a control of pests will result in an amount of lead residue so great that the most efficient spray removal methods now known will not reduce the lead in a material proportion of the crop to the 0.014 tolerance. This tolerance is therefore revised to 0.02 grain lead per pound of fruit for the 1933 crop. The tolerance of 0.014 grain per pound will become effective for the 1934 crop unless the intensive and greatly expanded work now being carried out on non-lead arsenicals proves successful and permits a total abandonment of lead for 1934."

How does this latest ruling effect the Massachusetts apple grower? Is it now necessary to substitute Calcium Arsenate for Lead Arsenate in the July applications as was intimated in a previous message a few days ago? Here is the opinion of A. L. Bourne and O. C. Roberts of the State College:

The substitution of Calcium Arsenate for Lead Arsenate during the remainder of the season is unquestionably the safest procedure for avoiding an excess of Lead Residue. However, the above mentioned increase in the Lead Tolerance permits the prolonged use of Lead Arsenate within certain limits as follows:

(a) Under no circumstances should Lead Arsenate be used in an amount exceeding 3 pounds in 100 gallons, within 8 weeks of harvest time.

(b) Calcium Arsenate should be used in any spray which is applied within 8 weeks of harvest.

(c) If a late July application is found necessary in a mixed block of fall and winter varieties the grower will find it more convenient to use Calcium Arsenate entirely.

(d) No arsenical should be used as a spray within 6 weeks of harvest on any variety because of the possibility of arsenical residue in excess of the tolerance. (.01 grain per pound) From data on hand, however, it appears that 90-10 Arsenate of Lead Dust may be applied as late as 4 weeks of the time of harvest and still avoid an excessive residue of Lead or Arsenate.

Present indications promise a more nearly normal emergence of Apple Maggot flies than was the case last year when they appeared about two weeks late. For this reason there will apparently be less need for late spraying. August 1 should be considered the dead line for arsenical sprays and then only on winter varieties. Under no circumstances should a spreader be used in any spray after July 15.

W. H. Thies,
Extension Horticulturist.

Remedy for Poison Ivy Rash

Of all the remedies that are recommended for the suffering caused by poison ivy, there is one which is really efficacious. That is a five per cent solution of potassium permanganate. This remedy has been recommended by Dr. James F. Couch, an expert on poisonous plants. Any druggist can mix it in a few minutes and the cost is little.

Bathe the affected skin freely with the solution, swabbing it on with a soft cloth or bit of cotton and the poison will be oxidized and destroyed in a few hours. On very tender skins the solution may be diluted one half.

A brown stain left on the skin by this treatment may be immediately removed with a one per cent solution of oxalic acid. If the skin is broken or raw, the acid will sting. In such a case the slower, less painful soap and water method might be employed.

Persons who work among poison ivy and poison sumac may prevent infection by washing exposed parts with a fifty-fifty mixture of water and glycerin to which five per cent of ferric chloride has been added. Allow it to dry on the skin.

Anyone desiring to destroy poison ivy by spraying, consult the County Agricultural Agent, F. C. Smith at the Essex County Agricultural School, Hathorne.

Highlights of Farm and Home Week

Massachusetts State College, Amherst

Tuesday—July 25

Opening Day — Forestry — Lawn Day — Tobacco and Onions — Fruit Growing — Homemaking.

Wednesday—July 26

Pomology — Homemaking — Farm Management — Home Flower Garden.

Thursday—July 27

Homemaking — Commercial Vegetable Production — Dairy — Annual Poultry Convention.

Friday—July 28

Home Gardens — Home Canners — Poultry — Beekeeping.

Special Feature

Food Preservation (9.30 A. M. daily): Tuesday: Fruits and Fruit Products; Wednesday: Vegetables; Thursday: Fruit Juices, Syrups, and How to Use them; Friday: Confections. Advanced registration necessary. Classes limited to 40.

Attention Rabbit Breeders

The Essex County Rabbit Breeders' Association announces its first annual lawn show which will be held on Sunday, August 6, 1933, at the Wa-Ho-Ge Rabbitry, 64 Cabot St., Beverly.

Entries may be mailed to: Misses Wales and Herrick, Superintendents, 31 Pratt Ave., Beverly.

Biggest and Best

A state official who checks up on fairs that receive state funds for their premiums stated that the 1932 vegetable show at the Topsfield Fair was the largest and of the highest quality of any in Massachusetts.

The slogan adopted by the vegetable show committee for the last few years has been "Quality Counts".

It should be the ambition of both amateur gardeners and commercial market gardeners to hold for Essex County this high position in the field of competitive vegetable exhibiting.

Nowhere in the state can such a high class collection of squashes be found as at Topsfield Fair. Last year over one hundred specimens were entered in competition.

In 1931 and again in 1932 the three winning squash entries in the Blue Hubbard and Warren Turban classes were purchased by the State Department of Agriculture for use in the Massachusetts Agricultural Exhibit at the Eastern States Exposition.

At Topsfield Fair last September there were over one hundred standard bushel boxes, market packed, entered in the bushel box classes. Nine men entered five boxes each in the five box collection class.

The management of the Topsfield Fair Vegetable Show is in the hands of a committee of twenty men, mostly market gardeners, who live in various parts of the county. In recent years a rotation of judges considered as good as can be found has been secured. These include Professor Grant Snyder of Massachusetts State College; Paul Dempsey of the Waltham Market Garden Field Station, and Mr. Thompson formerly in charge of the Waltham Field Station.

The hundreds of visitors at the Topsfield Fair who now make it a point to inspect the vegetable show is increasing yearly. This is one way in which the general public gives tribute to the hard work, high degree of skill, and sportsmanship of the men who each year bring their best to the show and arrange it so that it is truly a feast to the eye, of color, quality and uniformity.

E. E. Metcalf,
Instructor.

Flea Beetle and Blight

Many leaves of tomato and potato plants are perforated with small holes which have been caused by flea beetles. These small black beetles have caused much damage this season and should be controlled before infections set in from early blight.

After the leaves have been filled with small holes, blight spreads through the foliage very rapidly and if not controlled, the crops will be materially reduced.

Massachusetts Extension Leaflet No. 20, "Potato Growing in Massachusetts" contains full information on spraying or dusting. Calcium arsenate added to Bordeaux mixture will control flea beetles and blight.

C. M. Stearns

Question and Answer Column

May E. Foley
Extension Nutritionist

Question: Does drinking water with meals tend to make a stout persons stouter?

Answer: Most persons who are inclined to be stout find that drinking liquid with meals helps them to gain weight. These persons should drink most of their six or eight glasses daily between meals. Other liquids used in abundance act in the same way as water.

Q.: Is there any difference in nutritive values between ground and rolled oats?

A.: There is practically no difference.

Q.: Why is cooked cabbage sometimes indigestible?

A.: Cooked cabbage is sometimes indigestible because it is cooked for a long time with the cover on. Cabbage should be cooked only 10 minutes, if shredded, and not over 20 minutes, if quartered, and the cover left off.

Q.: What effect does cooking in aluminum have on vegetables?

A.: Cooking in aluminum has no effect upon vegetables or other foods.

Q.: Can we eat too much dark bread?

A.: The average normal person can eat dark bread every day without harmful, but rather with very beneficial effects. A few persons with irritated intestinal tracts must limit the amount of roughage they take. In such cases, dark breads three times a day might be too rough.

Q.: May I substitute tomato juice for my young baby, and how much shall I give?

A.: Tomato juice may be substituted for orange juice in equal amounts. Either is given to a baby at three or four weeks, starting with a teaspoon diluted with a teaspoon of water. At three months, the child should be taking two or three tablespoons, at six months four to six tablespoons, and at nine months, a half cup.

Q.: What is the value of sauerkraut?

A.: Sauerkraut has almost the same food value as cabbage. It is not as rich in vitamin C, but does contain lactic acid not contained in cabbage. Lactic acid has a very beneficial effect upon the intestinal tract, by destroying harmful bacteria.

Q.: If a recipe calls for sour milk, how can sweet milk be used?

A.: Put one tablespoon of vinegar into a cup and fill with sweet milk, then follow recipe.

Q.: If a recipe calls for sweet milk, how may sour milk be substituted?

A.: Sift one-half teaspoon of soda with each cup of flour and decrease the baking powder by one-half.

Garden Notes

Isn't there someone whose desperation increases at spring when the ground looks bare under trees? There is a remedy for that feeling. Chionodoxa, a star flower, if planted around your trees in November, will make a dense carpet of blue blossoms in early spring. "Heavenly blue" is the variety advised by A. M. Davis, Extension Specialist of the Massachusetts State College. Masses of green leaves follow, making one of the best known ground coverings for open spaces.

At a recent lecture, Professor Davis suggested that people in Essex County take advantage of the wild tiger lily which grows here in profusion. Cultivated, it is harmonious in an informal garden and rare in its choice coloring. Remember, gardens carefully designed will afford their owners a comfortable realization of appropriate color harmony well adapted to the surroundings.

Disease and Insect Control

Arsenate of lead is recommended by Professor Davis for the control of chewing insects; nicotine for lice; and pyrethrum (not poisonous) for diseased evergreens.

Children's Clothing

Leaders' meetings will be held during September in the northern, southern and eastern sections of Essex County for training in a new project, Children's Clothing. Mrs. Esther Cooley Page, State Clothing Specialist, will be assisted by Mrs. Mary McIntire, Home Demonstration Agent, in giving instruction to the leaders.

This project promises to be a popular one. Any communities desiring fall classes either in this or in nutrition or furniture renovation projects are requested to communicate with Mrs. McIntire, Hathorne.

The Good School Lunch

The mother who must pack two or three or even one lunch every day knows that it is the hardest meal of the day to plan. The lunch should always be planned in relation to the other meals of the day. Only too often the child eats a hurried and insufficient breakfast, carries only sandwiches, cake, pie or cookies in his lunch box, and comes home at night to eat a supper of bread and butter with sauce and cookies or cake. This gives an unbalanced diet with too much starch and sugar, and not enough building materials.

If the child is to get every day a quart of milk, two vegetables besides potatoes, and two fruits in addition to meat or meat substitutes, a definite plan will need to be made. It will be necessary to provide some vegetables at the noon meal and plan to use milk, vegetables and fruit in the school lunch.

Since sandwiches must necessarily furnish the main part of the school lunch, they may be varied from day

4-H Club Egg Laying Contests

In April, the Walnut Square School of Haverhill won the banner awarded monthly for the highest average of eggs produced by the members' hens. The club received 21.1 eggs per bird per member.

Blue ribbons were awarded to the following individuals whose birds averaged 23 eggs or more:

William Mahoney, John Taylor, William McCarthy, Joseph McCarthy, William Cranton, Charles Marston, Sidney Chadwick, Byron Noyes, John McCarthy, Theodore King, Edward Hyder, Merle McDonald, Mitchell Hyder, Kenneth Tilton, all of Haverhill; Albert Gilman, Andover; Ernest Law, Methuen; and Rene Deloge, North Andover.

Red ribbons were won by the following, whose birds averaged 20 to 23 eggs:

John Meehan, Michael Yemma, Orland Yemma, Melvin Thornton, John Makrogulous, Winthrop Vittus, all of Haverhill; Albert Batchelder, Andover.

For an average of 18 to 20 eggs per bird, the following boys were awarded yellow ribbons:

George Bogannam, Methuen; Thomas Bullock, Essex; Robert Charron, Alphonse Krafton, Edwin Cassano, Algerd Ramaika, Tony Moskal, all of Haverhill; Alfred Landers and Ernest Flynn, Wenham; Frank DeLuca, Peabody.

In May, the Live Wire Poultry Club retrieved the banner, winning it for the fourth time. Their average was 22.8 eggs per bird per member.

For an average of 24 or more eggs per bird, the following individuals were awarded blue ribbons:

Fred Decristofaro, Alex Decristofaro, John Makrogulous, John Taylor, John McCarthy, and Charles Marston, all of Haverhill.

Red ribbons were awarded to the following for an average of 22 to 24 eggs per bird:

Michael Yemma, Orland Yemma, Mitchell Hyder, Stanley Bednez, Edward Hyder, and John Meehan, all of Haverhill.

Yellow ribbons were won by the following for an average of 20 to 22 eggs per bird:

Merle MacDonald, Algerd Ramaika, Theodore King, Alphonse Krafton, John Sirski, Alexander Zatzos, all of Haverhill; Albert Batcheller, Albert Gilman, Andover; Frank DeLuca, Peabody; Rene Deloge, N. Andover.

to day. At least half whole grain bread should be used: Some good sandwich fillings are: :

1. Ground raisins, dates and cooked prunes, moistened with a little lemon juice. A few nuts may be added. If nuts are not used, peanut butter may occasionally be spread on one side of the sandwich. This mixture may be made up for a week ahead and kept in a cool place.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

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HATHORNE, MASS., AUGUST, 1933

No. 8

Topsfield Fair Plans Fine Show

Mecca of Essex County People On
September 6, 7, 8, 9

After weeks of preparation by officers and committee members, President Wigglesworth has announced that the Topsfield Fair promises to put on a wonderful Fair again this year. For the past ten years the Fair has shown a steady growth in quantity and quality of exhibits until it is now recognized to be the leading agricultural exhibit in Massachusetts.

The Topsfield Fair Flower show is far and away the best Flower Show at any Fair and the Vegetable Department boasts to be "First in Quality and Quantity" among the Vegetable Shows at any Massachusetts Fair. The 4-H Club, Poultry, Cattle, Swine, Domestic Science, Grange, Rabbit, Junior and Bee exhibits are not far behind. The Grange Committee under chairmanship of George Preston of Wenham, have secured six entries with others promised, which is double that of last year.

Mrs. Wigglesworth, chairman of the Flower Show announces that the flower building will be entirely different this year as she has secured the services of Architect Philip Horton Smith to lay out a new plan which will present a bower of beauty to all visitors and even excel previous efforts which are hard to beat. The Fruit and Vegetable Building will be rearranged and present a most pleasing picture with hundreds of exhibits of the Fall harvest. The Cattle Committee are busy and promise the biggest quality show ever, from the finest herds of Essex County, which are among the finest in the world.

The Executive Committee have spared no effort to make the free attractions please everyone. They will include Harness Racing, Running Races, Steeplechase Races, Automobile Races and special daily and nightly features. A feature this year will be Daredevil Townsend who hurls himself through an honest to goodness board fence on a Motorcycle, going eighty miles per hour. Of special interest this year will be the Fireworks which are costing more than twice the amount paid last year. In addition to the regular bombs and set pieces will be seen each night two dazzling fireworks spectacles representing persons, animals and action. These features will be changed each night so that visitors should buy season tickets and attend each night to see it all.

Ralph H. Gaskill

Mr. Ralph H. Gaskill, Secretary of the Essex Agricultural Society and Manager of the Essex County Farm-



ers' Cooperative Association has long been identified with agricultural interests in Essex County. Mr. Gaskill was formerly County Agricultural Agent with headquarters at the school. He is perhaps best known for his part in the management of the Topsfield Fair.

The admission price has been reduced to fifty cents, and all grandstand seats have been reduced. Never before has Topsfield Fair given so much for so little money and with business conditions rapidly improving, they are looking forward to a record breaking attendance.

Saturday, September 9th will be a gala day at Topsfield. The Legion Drum Corps Competition is always colorful and attractive and in addition the management is giving over the afternoon track events to Auto Racing, an innovation at Topsfield Fair, filled with thrills and spills. A wire cable has been put up on the outside fence to prevent possible accidents to spectators.

Starting the Wednesday after Labor Day, September 6th and running four days, September 6th, 7th, 8th, and 9th, it will in reality be the biggest week of the year for Essex County and Eastern Massachusetts folks and will long be remembered by both young and old. The Fair opens at 10 A. M. and runs continuously until 10:00 P. M., with a continuous program of events and a special night show each night beginning at 8 P. M.

With all of the Buildings filled to overflowing, with exhibits of all kinds, a continuous program of amusement, of education and hundreds of other interesting things to see, the Midway, Rides, etc., no one who lives within fifty miles of Topsfield will want to miss the show this year.

Essex County 4-H Club Workers Attend State Camp

The Massachusetts State 4-H Club Camp, known as Camp Gilbert, is held each year on the campus of the State College in Amherst. Although the Big Chief, Mr. George Farley was unable to be with us on account of illness, the camp ran through with a great deal of pep and enthusiasm under the direction of his four assistants.

This year the Camp's program was based on training older club members for Junior club leaders. There were three major groups this year; two groups of older club members; and the third group consisted of adult local leaders. Each group spent ten days in camp and consisted of about 75 campers. The local leaders conducted a special program of their own which was also based on Leadership. Round table discussions were held with county leaders and specialists in charge.

Regular Camp

The regular camp was organized into clubs consisting of members interested in the various projects. There were clothing, food, dairy and poultry clubs in the first camp and canning, homecraft, handicraft and garden clubs in the second camp. Each club elected a complete set of officers and held regular meetings each day. With the aid of the members of the college staff and the facilities of the various departments, a wealth of information and help was given to the club members. Every member of each club had an opportunity to hold an office and to carry out his specific duties, thus offering excellent training for everyone.

Beside the regular club meetings and project work the days program included opportunities for hobbies, organized games, swimming, free time, and each night a camp fire is lit, leaving lasting impressions for each one.

4-H Club Building

The campers took trips to Mt. Sugar Loaf and picnic suppers were held on Mt. Pleasant usually followed by Vesper service. The most impressive and inspiring activity of the entire camp was the dedication of the first 4-H Club building to be constructed on the campus of any college. It was made by club boys and paid for by club members and friends. There is no way of determining the amount of sentiment which surrounds

(Continued on page 4)

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Secretary, Earl B. Pride	East Lynn

Calendar

August 17—Project Tour sponsored
by the Future Farmers of America.
September 5—School opens for new
students in agricultural and home-
making departments.
September 6—School opens for old
students in the homemaking de-
partment.
September 5, 6, 7, 8—58th Annual
Meeting of the American Forestry
Association at Franconia, N. H.
Attendance not limited to members.
(See article in this issue)
September 6, 7, 8, 9—Topsfield Fair.
September 17—F. F. A. Camp.
October 2—Upper classes return,
Agricultural department.

Enrollment in Vocation- al Agricultural Classes

For the school year 1932-1933 the
enrollment in vocational agricultural
courses in the twenty schools and de-
partments in this state reached a to-
tal of 1114 as compared with 1061
for the preceding year. Several
schools have been obliged to restrict
their enrollment due to the limited
facilities and increased demand for
admission.

Mr. Franklin Roberts, former in-
structor at Essex Aggie, now Pro-
fessor of Sociology at Boston Univer-
sity, was a recent visitor to the
School. Mr. Roberts was accompanied
by Mrs. Roberts and son.

Cultivated Blueberries At E. C. A. S.

For a second season a number of
people have had great satisfaction in
observing the development of the cul-
tivated blueberries, growing in the
Fruit Nursery of the School. Every
careful student concedes that the
blueberry now lends itself to cultiva-
tion and management. Not only are
the blueberries large and attractive
but the quality of the varieties is not
only different but alluring. Of the
ten varieties under cultivation at
least five have made a remarkable
showing.

Concord is one of the earliest and
also one of the largest. It is mild and
delicious but, a trifle darker and
flatter than some of the other varie-
ties. Katherine, and Ramcoas are
also very prolific, and large valuable
fruits. Rubel, one of the first varie-
ties to be introduced, is still valuable.
Large size, beautiful light blue, late
very prolific fruiting, and clear acid
makes it the challenging variety.

One would not be treating the situ-
ation correctly without mentioning
unsatisfactory varieties. In that con-
nection three varieties should be
mentioned Sand, Grover, and Adams.
The latter is a good berry and a
beautiful bush but not very prolific.
The other two varieties are negligible.

In a later article we will try to dis-
cuss cultural directions with an ever
increasingly interesting group.

Farm Women's Earn- ings Important Cash Income

"Farm women have made a valiant
effort to maintain a desirable stan-
dard of living for their families, in
spite of the difficulty of conditions
during the last 10 years", says Dr.
C. W. Warburton, director of exten-
sion work, United States Department
of Agriculture. "The small income
from the sale of a farm woman's gar-
den vegetables, or her eggs or poul-
try, or butter and other dairy prod-
ucts, or even her own baking, has, in
some cases, been the only cash coming
into a farm home.

"Because single sales were for
small amounts, this income was for-
merly looked on as 'pin money' in
comparison with the expected yield
from the major farm crops or live-
stock. At present, by means of it, the
woman on the farm is at times keep-
ing the whole family ship afloat. For
example, I know a farm women's
market in Maryland, where 76 of the
women have paid farm taxes from
their sales. Their gardens and poul-
try and canned goods have provided
the family with good food, too, and
many of them bartered what they had
or what they could do, for what they
lacked, either goods or services."

Project Notes

Leonard Briody and Charles Stand-
ley of Beverly have both demon-
strated the fact that "where there's a will
there's a way." Having no land at
home for a project, each of them
rented about 1-3 acre of land. As is
often the case in taking whatever
land is available, they both drew
about at "witchgrass" pieces as it
would be possible to find, but by keep-
ing the green tops cut off they now
have two very fine gardens. Both are
finding a market for their surplus
products near their homes.

Leo Poisson of Andover harvested
approximately \$40 worth of straw-
berries from one twentieth of an acre
of land. He has renovated part of
this year's bearing bed and has a new
bed that he hopes will repeat next
year.

Richard Poirier and Ernest Stans-
field are cropping quite intensively
two and a half acres of land on Rob-
ert Sawyer's farm in Bradford. They
are getting fine experience in both
the production and marketing end of
the game as they have planted fifteen
kinds of vegetables and are disposing
of their products both at wholesale in
Haverhill and through a retail route
they have established in Bradford.

Ernest April is farming five acres
(some on the home farm and some
rented) in Essex, with the help of
two younger brothers who are headed
for "Essex Aggie." His main crops
are strawberries, corn, beans, peas,
and tomatoes with smaller plantings
of others for the sake of variety, as
he disposes of his products through a
roadside stand. Sixty-seven bushels
of peas gave excellent returns.

The two "Farmerettes" of the class
of 1935 have ownership projects that
would make many of the boys sit up
and take notice: Ruth Fairweather of
Andover, in a recent report, says:
"I'm a busy woman." Her fine vege-
table garden of 1-3 acre and her
flower garden with some sixty var-
ieties of flowers are good evidence
of the fact that she is right on the
job. She is finding an outlet for both
products among her neighbors.

Elizabeth Crosby in West Peabody
is combining vegetable gardening and
poultry with good results. She is find-
ing a ready sale for her products
right at the farm.

A. L. Dacy.

Student Gordon Hall has an out-
standing three-fourths ownership
vegetable garden. He has the weed
crop well under control and has been
carrying out a spray program of Bor-
deaux for potato blight, magnesium
arsenate with calcium caseinate
spreaders for Mexican bean beetle,
nicotine sulphate for onion thrips, and
Bordeaux with arsenate of lead for
blight and striped cucumber beetle
control on muskmelons and cucum-
bers. He is also attempting to con-
trol the European Corn Borer injury
to his corn by destroying the borers
by hand as the broken tassels indi-
cate their presence.

Control Measures

Squash bugs, striped cucumber beetles may be controlled by applying cyanogas, Dust A, with a good duster just below the plants on a hot, sunny day. Use 20 to 25 pounds to the acre when plants are dry.

Fly Control—Treat manure piles with Cyanamid, or use Hellebore 1-2 pound in 10 gallons of water to ten bushels of manure. After preparing the above let stand 24 hours.

Pyrethrum—This material if fresh should be dusted, at night when flies are at rest, around rooms, milk house, stables, etc.

Spray—use lightly—Fish oil, one gallon; Oil of pine tar 2 ounces; Oil of Pennyroyal 2 ounces; Kerosene, one pint.

Squash, cucumber, melons—Bacterial wilt has, as usual, taken its toll this season due to failure to control the striped cucumber beetle. Dust these with a mixture of 1 part calcium arsenate, 2 parts copper sulphate, 7 parts hydrated of lime.

Black rot of grapes—This causes more damage to grapes than all other diseases combined. Copper dust 20-80 or Bordeaux (4-4-50) at two weeks intervals should be used to control up to 2 or 3 weeks before harvest. If rainy apply more frequently.

F. C. Smith,
County Agent.

Rat Proofing Buildings

Stretch heavy wire netting on half inch mesh around base of the building from ground up about two feet above foundation and put an 8" strip of galvanized iron just above the netting. Also carry the netting and strip around the doors and door frames. A wide metal strip may be used instead of netting.

Between joists of base nail a half inch board and partly fill this cavity with broken glass. Rats will not come in through a wall with broken glass. This material may be placed in the rat holes and completely prevent further use of that particular run-way.

F. C. S.

Realm of the Honey Bee

The film entitled "Realm of the Honeybee" is being booked for the period beginning November 7 through November 21. This film was shown extensively last fall. Being one of the newer ones issued by the United States Department of Agriculture its popularity is such that it requires booking at least two months in advance.

Instructor G. A. Meigs, who has the film in charge gives an accompanying lecture which has been well received, both in and out of the county.

Clubs or individuals desiring to see the film, which is as entertaining as it is instructive, are requested to communicate with Mr. Meigs at this School.

G. A. M.

Plans For Pullorum Disease Testing

Poultrymen who plan to use eggs for hatching purposes should recognize and adopt the following measures before the next hatching season:

1. All birds on the premises should be tested annually.

2. Split flock testing should be discouraged.

3. Known infected flocks should be tested early to permit retesting and elimination of infection before the next hatching season.

4. New stock should be purchased from known pullorum disease-free flocks. (Consult your county agent for information.)

5. Contest or show birds should be tested before re-admitting them into the flock.

6. Only pullorum disease-free flocks should be used for hatching purposes.

Application cards for testing will be mailed to owners whose flocks have been tested last season and also to owners who send in requests for testing.

Henry Van Roekel,
Dept. of Veterinary Science,
Amherst, Mass.

Apple Crates of Standard Size

In an effort to agree upon a crate of standard size for marketing apples, twenty-five representatives of fruit growers' organizations in Massachusetts, Vermont, New Hampshire, Connecticut, and Eastern New York, met recently in Springfield.

A crate 11 by 17½ inches, with a net capacity of 2645 cubic inches was finally agreed upon as being the most desirable. This crate is to be known as the Approved Eastern Apple Crate and may be so marked by the box manufacturers or by the grower. The fruit growers agreed the 2645 cubic inches should be the standard capacity for crates, but that growers who preferred crates of varying dimensions should be permitted to use them.

Personals

Miss Ethel M. Moore, Mrs. Edith Morrill, Miss Ruth Emerson and Miss Margaret Harris, all of the Home-making Department and Mr. Fred R. Hardy of the Agricultural Department, have recently visited the Chicago Exposition.

William F. Brown, Essex Aggie '28, of Marblehead, was married to Miss Frances Bates of Danvers on August 18. The wedding took place at the home of the bride's parents, 31 Conant St., Danvers.

Forestry Clans To Meet In September

Three days of motor trips through the beautiful White Mountains of New Hampshire will feature the 58th Annual Meeting of the American Forestry Association early in September. The dates of the meeting, September 5, 6, 7, and 8—follow immediately after Labor Day and offer opportunity for a week's profitable outing, filled with conservation activities and healthful mountain recreation. Interpersing the field trips will be evening and mid-day gatherings at which Secretary of Agriculture Henry A. Wallace, Governor John G. Winant of New Hampshire, Senator David I. Walsh of Massachusetts, Robert Fechner, Director of the Civilian Conservation Corps, Henry S. Graves, Dean of the Yale Forest School, R. Y. Stuart, Chief Forester of the United States, and others will speak.

Attendance is not limited to members of the American Forestry Association. All sessions, trips and privileges of the meeting are open to the public and the public is cordially invited to attend. Further information in regard to hotels, rates and other details may be obtained by writing the American Forestry Association, 1713 K Street, N. W., Washington, D. C.

Special Apple Market Reports Resumed

The special apple market reports of the Massachusetts Department of Agriculture, available to growers early in August, will continue through the apple season into the spring months. This is the tenth successive year that this service has been in operation.

The Department announces a new low postage rates for the season for second class mail delivery. Many growers found this class of mail service satisfactory last year, resulting in an increased number of subscribers, which makes the new low rate possible.

All requests for these reports should be sent to Professor W. R. Cole, Secretary, Massachusetts Fruit Growers' Association, Amherst, Massachusetts.

Damping off is a disease confronting truck gardeners. The Waltham Field Station recommends avoiding thick seedlings, and use of Red Oxide of Copper. Oscar Edmonds, Lynn Fels Parkway, Saugus, successfully used it on spinach. Ask him about it.

F. C. S.

TOPSFIELD FAIR
TOPS THEM ALL!
20 MILES FROM BOSTON
ON NEWBURTPORT TURNPIKE

Fall Projects in Women's Extension

The projects to be stressed are Home Nursing, Children's Coat Making and Furniture Renovation. Mrs. McIntire is ready to receive any requests which the Town Chairmen like to make for fall work.

In September Mrs. Esther C. Page will begin her County-wide Children's Clothing project.

Clothing centers will be held in Saugus, Danvers, Ipswich and Newburyport.

Furniture Renovation and chair canning are also planned for the fall.

Home Nursing Classes

Home Nursing groups under the direction of Mrs. Mary E. Roundy, Home Nursing Instructor, are to be held in Peabody, Haverhill and Manchester, starting in September. Applications for spring classes should be sent to Mrs. McIntire.

Communities Plan for Fall Work

Extension Communities all over Essex County are now making plans for the coming year. Groups are being formed throughout the county for the different projects to be held but have not yet notified the Home Demonstration Agent of their completion.

Children's Clothing

A project of new interest will be conducted in Essex County this fall. Mrs. Esther Cooley Page, whose projects have always been highly approved by our women, has set aside the Tuesdays falling on September 19 and October 3, and Fridays, October 20 and November 10, to meet leaders and instruct them in children's coat-making.

Any women interested in having this project carried in their communities are asked to send their names to the Home Demonstration Agent, Mrs. Mary M. McIntire, at this school.

The Home Demonstration Agent, Mrs. Mary McIntire, and Mrs. Mary Roundy, Instructor in Home Nursing, attended a meeting of county Extension councils held at Amherst July 27, during Farm and Home Week.

The first fall meeting of the advisory council of the Women's Extension Department in Essex County, will occur on Tuesday, September 12 at the Essex County Agricultural School.

Cooperative Canning

Whatever may be said in regard to the value of community garden plots, it certainly is true that the surplus produced should be conserved for future use. With this in mind, Mr. Sewell W. Britton of the Salem Community Gardens, has established two canning centers; one at the Training School and the other at the Cabot Farm.

A unique system has been worked out by Mr. Britton which allows the

gardeners to profit equally in the canning of their products. The system, which is working out successfully in Salem, is that one product at a time, is canned on as large a scale as possible. Thus the gardeners having a surplus of beans, pick and prepare these on the day set and the whole quantity is canned at once. Then those contributing the product and participating in the work of canning all receive an equal number of cans regardless of the amount of product contributed. This method has demonstrated what can be done in a cooperative way. To date 5,000 cans have been used to preserve the surplus.

This feature of the Community Gardens in Salem is bound to attract notice, and the credit is due to the careful planning and organizing ability of Mr. Britton, Mrs. Mary McIntire, Home Demonstration Agent and Prof. W. R. Cole of the Mass. State College.

G. E. G.

ESSEX COUNTY 4-H CLUB WORKERS ATTEND STATE CAMP

(Continued from page 1)

this building dedicated to the boys and girls of Massachusetts who make the 4-H Club pledge their goal in life. This building will be known as the "Farley 4-H Club House", named for our state 4-H Club leader.

Essex County Delegates

Among the members from Essex County attending Camp Gilbert for the first camp were Victoria Babicka, Andover, Clothing delegate; Eleanor Buckley, W. Newbury, County Food delegate; C. Dena Bulgarris, Byfield, State Food delegate; George Bogannam, Methuen, Poultry delegate; Alfred Cipolla, Haverhill, Poultry delegate; and Fred Basile, also of Haverhill, as special delegate.

Of this group Eleanor Buckley was chosen the Camp Spirit by the girls of the camp, and she is delegated to take the spirit of this camp into the camp of 1934.

Candlelight Service

At the same candlelight service, which is always held at the end of a 4-H Camp, Alfred Cipolla and Dena Bulgarris were chosen as the boy and girl best typifying the Heart H. The delegates to the second camp were Clifford Nelson, Methuen, State Handicraft delegate; Proctor Houle, Newbury, Garden delegate; Walter Eldridge, Georgetown, garden delegate; Esther Usher, Danvers, Canning delegate; Genevieve Bingham, North Andover, Canning delegate; Eileen Murphy, North Andover, state news delegate, and Margaret Randall, Haverhill, special delegate.

Leaders

The leaders were Mrs. Leon Jordan, Groveland, Mrs. Ada Usher, Danvers, Mrs. G. Richard Abbott, Andover, Mrs. Alice Albrecht, North Andover, Miss Mary Bailey, Andover, Miss Margaret Bartlett, Byfield, Miss Dor-

Ball Brothers' Contest

The County Contest

1. Canning does not have to be done in Ball jars.
2. Open to any canning club member.
3. Exhibit two jars tomatoes, two jars peaches, two jars string beans.
4. County prizes: \$2.50, \$2.00, \$1.50, \$1.00, \$1.00, \$1.00, \$1.00. County prizes will be awarded only when there are fifty or more entrants.

No county prizes will be given until after the state contest. Any first, second or third prize winner failing to exhibit at state contest will forfeit the county prize.

The State Contest

1. Open to the three first prize winners in the county. Any county not having fifty entries may compete in the state contest even though no money prizes are given in the county.
2. State Contest to be held at the Union Agricultural meeting in January, 1934, at Worcester.
3. First five prize winners at state contest to be awarded a trip to Camp Gilbert in 1934.

August — The Beekeepers' New Year

1. Old and failing queens should be replaced so that the colony may have an abundance of young bees for wintering.

2. See that the stores of the colony are sufficient for wintering.

It takes in the neighborhood of sixty pounds of stores to winter a good strong colony. This honey should preferably be of the early season production rather than from the fall flowers. If there has been a dearth of nectar-secreting flowers in your neighborhood this year, your colony should be slow fed of sugar syrup.

G. A. Meigs,

Instructor in Beekeeping.

Herbert Amidon of Saugus is attendant at the Half Way Stand on the Newburyport Turnpike. This stand is now owned and operated by the Essex Chapter, Future Farmers' of America and complies with regulations of the Massachusetts Department of Agriculture.

othy Alger, Winthrop, Mr. Silas Little, Newbury, Mrs. William Cann, Danvers, Mrs. Catherine McInnis, North Andover, and Mrs. Frank Sweetser, South Groveland.

Horace J. Shute.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 14

HATHORNE, MASS., SEPTEMBER, 1933

NO. 8

Care of Newly Housed Pullets

J. Stanley Bennett

Clean house thoroughly in preparation for pullets, washing floors with lye and hot water.

Paint roosts, roost supports, dropping boards, walls adjacent to roosts, nests and loose equipment with creosote, carbolineum, or crank case oil to prevent red mites from getting a foothold during the coming year.

See that nesting space is adequate. High producing birds should have a nest for every four birds, or its equivalent in concealed nests without partitions. It pays to have the face board of a nest high enough to allow for four or five inches of shavings, thereby saving on labor, breakage of eggs, and reducing the number of soiled eggs.

Shavings and straw, bale for bale, make an excellent fall litter. In the winter if dampness troubles, peat moss may be substituted.

Visit pens frequently if pullets are in production when housed, and put floor layers on nests. This may help to avoid pickouts then and later.

See that all birds roost properly the first few nights. Roosting in nests soils the nest material, and birds crowding on the floor are the first to catch colds and spread trouble.

Ventilate rather freely with open type houses but so as to avoid drafts; restricted ventilation should be practiced only in insulated houses. Winter ventilation should be high in the fronts of the houses.

Birds should be fed in fall so as to maintain or increase weight to avoid fall molt or slumps in production. Weight may be regulated through adjustment or scratch feeding or by use of a fleshing mash.

Essex Aggie Football Schedule

1933

October 6—Malden Seconds

October 12—Salem Seconds
(at Salem)

October 21—Open

October 28—Keith Academy
(at Lowell)

November 4—Woodbury High
(at Salem, N. H.)

November 11—Amesbury High
(at Amesbury)

November 17—Stockbridge Aggies

November 25—Open

Evening Short Course In Dairying

Are you interested in taking a milk analysis course at this School starting on Wednesday, October 18, and continuing weekly for ten lessons on



subsequent Wednesday evenings from 7.30 to 9.30 P. M.?

The purpose of the course is to aid you to improve the quality of your milk and enable you to meet in a satisfactory way the state and local legal requirements pertaining to milk. It covers the following dairy practices: testing of milk and cream for butterfat; total solids; sediment, acidity; adulterations and preservatives; watering; skimming; the methylene blue test for keeping quality; detecting off flavors and their cause; scoring of milk; bottles and caps; bacteria, good and bad; detecting causes of high bacteria; milk borne diseases and how to avoid them; legal requirements; milk regulations; farm scoring; milk houses; scoring of city milk plants; and the production of clean, safe milk.

The course will be limited to a class of twelve. Please signify as soon as possible your interest in this matter. For further information and enrollment, address, The Director, Essex County Agricultural School, Hathorne.

Prepared Mouse Bait For Orchards

To the farmer who has cared for his orchards and raised them to the age of profitable bearing, nothing could be more discouraging than to see his trees wither and die under the ravages of field mice. Nevertheless, hundreds of valuable trees, both young and old, are thus killed every year throughout New England. Much of it might be avoided. In many orchards meadow mice will work under or over wire guards so that other means of protection must be used. If pine mice are present, wire guards or other protectors are of no avail, since they burrow and attack the trees below the surface of the ground. Since the poison bait method is the most satisfactory way to control field mice under these conditions, a completely prepared poison bait has been made available to interested orchardists.

As a result of years of experience, it has been found that steam-crushed whole oats properly mixed with strychnine and protected with paraffin oils is an effective bait. This bait is manufactured under the supervision of the Biological Survey, U. S. Department of Agriculture at a mixing plant financed by Idaho farmers. It is distributed by several cooperative organizations at cost to orchardists. It is usually cheaper and more effective than home-made preparations.

The baits should be exposed in October or November. Under New England and New York conditions, a heaping teaspoonful of bait should be placed in poison stations such as wide-mouthed bottles or jars, tin cans, home-made stations or commercial stations now on the market. One container should be set near the base of the tree to be protected. After one month carefully examine the treated area for fresh signs of mice and repeat the poisoning if necessary. About one pound of bait will treat an acre of trees.

The Massachusetts Farm Bureau Federation, 131 Lexington St., Waltham, is handling prepared mouse bait and will furnish complete information upon application.

At a regional public speaking contest sponsored recently in Springfield by the Future Farmers of America, Albert W. Richardson representing Massachusetts, placed first and will be eligible to compete in the National contest at Kansas City in November.

November 28 Graduation

Essex Farmer and Homemaker

HATHORNE, MASS.

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Eastern Massachusetts Society of Beekeepers

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Calendar

- October 2—Return of agricultural students.
- October 3 and 4—Fruit and vegetable exhibit sponsored by the Massachusetts Horticultural Society at Horticultural Hall, Boston.
- October 3 and 20—Demonstrations of children's coat-making for community leaders at this School.
- October 10—Meeting of Extension Advisory Council.
- October 13, 14—Vocational agricultural judging contests at Amherst.
- October 20—All day Senior-Junior field day at the School.
- October 21—Meeting of the Massachusetts Home Economics Association in the homemaking school.

New Students In Homemaking Department

College and high school graduates, as well as undergraduates, have enrolled this year in the homemaking department of the school. All seem to recognize the value of a training in foods, clothing and the related arts.

The seventy-eight new students are: Miriam Birch, Claire Moran, Rita Pasquale, Bessie Risman, Lynn; Dorothy Blake, Cliftondale; Alice Boyle, Marjorie Conley, Esther Ryan, Mary Thomas, Peabody; Ruth Bradstreet, Helen Ferguson, Virginia Harrigan, Mildred Roberts, Grace Stansfield,

News of the School At A Glance

September 13

The School furnished exhibits from the division of floriculture, the school library, the vegetable garden division farm crops and the division of science at a meeting of the Grange held in Middleton.

September 15

Prizes were awarded to the following girls for clothing made during their summer home projects: (Freshmen) Dorothy Thorn, Saugus, first; Marjorie Steeves, Saugus, second; Edna Goodale, Danvers, third. (Juniors) Grace Pramas, Danvers, first; Mary Peterson, Salem, second; Vera Dixon, Andover, third.

Mrs. Mary McIntire, Home Demonstration Agent, judged the clothing.

September 28

H. Linwood White, Instructor in Floriculture, was the guest speaker at a special assembly in the homemaking department. His lecture dealt with the care and arrangement of flowers.

October 2

The old boys returned to the agricultural department after completing summer projects of varied natures.

Announcement has been received from Mrs. Annette Herr that on September 25 the broadcasting hour of the Massachusetts State College Forum officially changed to 1.35 P. M. Standard Time.

Danvers; Marie Brinley, Jean Currier, West Newbury; Agnes Burke, Florence Hirst, Methuen; Ella Cederberg, Helene Hall, Constance Hathorn, Dorothy Lewis, Andover; Eleanor Arrington, Catharine Bates, Theo Butts, Grace Cashman, Claire Dooley, Elizabeth Johnson, Catherine Larkin, Mary McElroy, Frances Meehan, Sara Munroe, Mollie Phippen, Grace Smith, Mary Swiniarski, Salem; Beth Austin, Salisbury; E. Lorrain Biffin, Dorothy Bruce, Olive Campbell, Agnes Cooper, Olive Drew, Elsie Hamilton, Ruth Hull, Doris Payne, Elizabeth Smith, Dorothy Stevens, Phyllis Thompson, Alberta Williams, Saugus; Marjorie Hudson, Newbury; Freda Peterson, Newburyport; Mildred Humphreys, Ruth Covell, Louise Kane, North Andover; Bernice Killgren, Amy Morgan, Josie Sheldon, Janice Smith, Middleton; Eileen Linehan, Bradford; Elizabeth MacGibbon, Haverhill; Janet McCrone, Amesbury; Corinne Stuart, Eleanor Tucker, Gloucester; Alma Welch, Topsfield; Elizabeth Cole, West Boxford; Doris Cooke, Thelma Hollingsworth, Nahant; Virginia Drown, Thelma Jones, Virginia Kelliher, Ruth Morse, Beverly; Madeline Featherstone, South Hamilton; Milliecent Ford, Edith Hazelhurst, Kathleen McAuliffe, Leila Wray, Lawrence; Louisa Franklin, Merrimac; Josephine Hogan, Swampscott; Evelyn Homan, Wenham.

Agricultural Department Filled

With an enrollment of ninety-two new students in the agricultural department, this year's total marks the highest the School has ever realized. It would seem that young people are becoming more and more conscious that for normal living one must maintain a responsibility which is simple and dignified, exemplified so prominently in agriculture.

Following is a list of the students who have been admitted:

Robert Bridges, Benjamin Fairbrother of West Newbury; Caryl Brown, Merrimacport; Andrew Bye, Gilbert Freeman, Gildo Santin, Lawrence Shanks, John Slattery, John Spencer, Beverly; Donald Cail, Albert Collins, Stanley Haines, Emile Levesque, Arthur Purdy, Eileen Stewart, Ralph Walfield, Danvers; John Christensen, Ilsey Dole, Charles Donovan, Saugus; Charles Clinch, Anthony Dichirio, Richard .Estes, .Swampscott; John Fullington, Warren Goodridge, Edward Mello, Allen Newton, George Thompson, Charles Ward, George Foster, Peabody; James Gould, Archie Nimmo, Methuen; Norman Flynn, Evan Grant, Arthur Henshaw, Walter Mansfield, Woodward Walker, Kenneth .White, .Salem; William Hayes, Beach Bluff; Mildred Hills, Byfield; Cecil Hollingsworth, Carroll Killilae, Joseph Lydon, Nahant; James Nicoll, Ballardvale; Lewis Norwood, Russell Wonsom, Rockport; Warren Page, Louis Rosi, Middleton; Charles Pettingill, Bradford; Teddy Smolak, Francis Phair, North Andover; David Rennie, Arthur Smith, Andover; John Robinson, Newburyport; Herbert Whitehouse, West Peabody; Franklin Wolfson, Newbury; Norman Wood, Amesbury; Edgar Adams, Ipswich; Thomas Ambrey, Fred Ballantyne, Archie Buder, Joseph Buckley, William Healey, William Long, Charles McKew, Augustine Sheehy, William Taylor, Fred Young, Lawrence; Arthur Ames, Porter Stone, Haverhill; Leo April, Harvey Underwood, John Wilson, Essex; Wesley Bacheller, Edward Bessom, Leonard Best, Norton Bowden, Warren Bowley, Frank Conti, Merle Graffam, Robert Hamilton, Edward Mahan, Arthur Morgan, Vincent O'Donnell, Elmore Smith, Dunbar Spence, Norbert White, Lynn; Bruce Bowden, William Moore, Salisbury; Stanley Bickford, George Doore, Wendell Smith, Lynnfield Center; Clarence Darbe, Merrimac.

Cook scrambled eggs in a double boiler. In baking eggs or a custard put the dish in a pan of water and have the oven heat moderate (350 degrees F.) To get maximum food value always apply this principle of moderate heat in cooking eggs.

**Graduation
November 28**

Alumni Notes

Bernice Ogden, Newburyport, and Janice Wray of Methuen, both of the class of 1933, have returned to the homemaking school as laboratory assistants for the coming year.

Dorothy Williams, a member of this year's graduating class, has entered the Lynn High School for a post graduate course.

The following graduating members of the class of 1933 are enrolling as student nurses in hospitals in and near Essex County: Catherine Lee of Peabody, St. Elizabeth's Hospital, Roxbury; Helen Rogers of Lynn, Lynn Hospital; Olive Pinney of Danvers, Children's Hospital, Boston; Thelma Healey of Lynn, Salem Hospital; Clara Wilson of Essex, North Shore Babies' Hospital, Salem; and Margaret Ahearn, '32 of Salem, Massachusetts General Hospital, Boston.

Richard Murray, class of 1923, is a livestock auctioneer, with offices at 60 State St., Boston.

Virginia Merrill, Danvers, of this year's graduating class, is employed at Doherty's Food Shop in Danvers.

A baby daughter was born to Mr. and Mrs. Lawrence Westcott early in September. Former student Westcott graduated from the School in 1931.

It is with sadness that we chronicle the death of Lawrence Meister who died suddenly at his home in Saugus on Thursday, September 21. Student Meister was a member of the class of 1935.

Winslow Dunnells, class of 1923, recently visited the School in the interest of his class reunion which will be held on the day of graduation in November.

Mrs. Joseph Ferrick, formerly Miss Esther Perkins, of the class of 1928, was a recent visitor at the School. After the middle of October her address will be 74 Bromfield St., Newburyport. Mrs. Ferrick is Secretary of her class and has started planning for the class reunion to be held in November.

Miss Emily Jordan, class of 1928, formerly of Amesbury, is now living at 50 Silver St., Dover, New Hampshire.

William Chase, class of 1932, recently wrote that he is enjoying his work in White River Junction, Vt., where he is connected with the Windor County Cooperative Farmers' Exchange. Aubrey Vaughan, '26, is with the same corporation.

Otis Curtis, class of 1931, has been appointed superintendent of the E. L. Austin farm in Newbury.

Radio Health Programs

Health messages sponsored by the Public Education Committee of the Massachusetts Society and the Massachusetts Department of Public Health are broadcast through the courtesy of Station WBZ on Fridays at 4.30 P. M.

The following medical subjects will be discussed on the dates indicated:

October 13—Appendicitis.

October 20—Problem of Tuberculosis in the Adolescent.

October 27—Rheumatism — Then and Now.

Reduced Fees—Holstein-Friesian Association

The Holstein-Friesian Association of America announces a temporary reduction in fees, extended by the Executive Committee to November 30, 1933. Until then, these low flat rates apply to both members and non-members: Registrations, 75c; Transfers, \$1.00; Memberships, \$10.00.

There will be no further extensions. November 30 is positively the final date for filing applications at these reduced rates. If you have animals to register and transfer, send for free blanks and instructions. Do not overlook this last opportunity.

Those who find it impossible to pay the entire amount of the fees now may take advantage of the low rates by sending in their applications at once with a remittance on account and they will be held for the balance.

Houghton Seaverns, Secretary, Holstein-Friesian Association.

Cooking To Conserve Food Value

Protein, minerals, vitamins—these are the chief food values contributed by eggs to the diet. Egg yolk is rich in iron. It also contains phosphorus and calcium, and is a good source of vitamins A, D and G. Some vitamin B and vitamin E are also present. Among protein foods, eggs are in a class with meat and milk. So the first point in cooking eggs to conserve food values, says the Bureau of Home Economics, United States Department of Agriculture, is to consider the effect of heat on their protein. Intense heat quickly sets the protein of the egg and makes it hard and leathery. Moderate heat gradually coagulates the protein but leaves it tender and soft.

For soft-cooked eggs, place the eggs in cold water, preferably with a rack in the saucepan to keep the eggs from direct contact with the heat. Heat the water gradually to simmering, but do not let it boil. Remove the pan from the fire when the water simmers, cover, and let stand for a few minutes, depending on how well cooked you wish your eggs.

Aggie Students Awarded Prizes at Topsfield Fair

Eighteen dollars, and many ribbons were awarded this year to students of this School for exhibits at the Topsfield Fair.

For fruit and vegetable exhibits, students Poirier and Stansfield of Bradford, together won one first and one second prize; Leonard Bridgely, Beverly, two seconds; Richard Colby of Haverhill, one second, and two firsts; Thomas Swiniarski, Peabody, one first; Elizabeth Crosby of Peabody, one first; Austin Basso of Andover, one first, one second; James Smith, Andover, one third; Clinton Spencer, Ipswich, one first, one second; Gilbert Chadwick, Bradford, one first; Gordon Hall of Ballardvale, two firsts; Francis Sparks, Andover, one first; Alden Parker, Topsfield, one second; Lorin Clark, Merrimac, one second; Gilbert Wallace, one second.

For superior poultry exhibits, the following students were awarded prizes:

Austin Basso, one first, three seconds, two thirds; Alden Parker, two firsts, one third; Thomas Swiniarski, one first.

Judging teams and individuals represented by this School placed high in competition with out of county schools. In plant identification, Albert Doggart placed first individual, Dora Winchester, second, and William Tinsch, third. The Essex team, including Dora Winchester, Saugus; Albert Doggart, Lawrence, and Hartwell Daley, Salem, placed first. The dairy judging team placed second, and consisted of Chester Ellis, Olin Donnelly, and Eric Peterson. Among twelve competing teams, the Essex Aggie vegetable judging team won second prize. This team was made up of John Stepanchuk, Haverhill; Forrest Haynes, Haverhill; Chester Buzek, Peabody. The Essex County 4-H club team won third place. Instructor Wood's fruit judging team won second place for the Aggies. James Gardella of Haverhill, Fred Basile, Haverhill, and Frank Cutting of Gloucester comprised this team.

Ralph Broughton, Thomas Swiniarski, both of Peabody, and James Gardella of Haverhill made up the Essex poultry judging team, which placed third. Thomas Swiniarski, winning third individual place was chosen one of the two boys to be represented on the State team which judged at the Eastern States Exposition. Ralph Broughton was his alternate.

Don't wait too long to buy cranberries for cocktails and jelly. The price will probably go up steadily. For the cock tail just cook the cranberries and don't get them too sweet. Strain and add small amount of orange and lemon juice for good flavor. This is excellent when served cold.

New England Farm Bureau
CENTURY OF PROGRESS
TOUR

For all Rural People

Sponsored by the
Massachusetts Farm Bureau
Federation

Saturday, October 14, to
Thursday, October 19

State College On Air During October

Farming, homemaking, and gardening are outstanding in the radio programs presented by the Massachusetts State College during the month of October over various stations covering Massachusetts. The Massachusetts State College Farm Forum is a regular feature on Stations WBZ-WBZA, Boston and Springfield, every Monday noon at 12.35, and the M. S. C. Home Forum follows an hour later the same day.

The October schedule of the Farm Forum follows:

October 9—"Winter Outlook for Dairy and Poultry." M. H. Branch.

October 16—"Electrical Conveniences for the Dairy Farm."

October 23—"Cashing in with Small Fruits in the Back Yard." W. H. Thies.

October 30—"Feeding Poultry for Health and Production." J. C. Graham.

On the Home Forum program the topics and speakers are as follows:

October 9—"Child Development." Mrs. Ruth D. Morley

October 16—"Bulbs that Bloom in the Spring." Arnold M. Davis.

October 23—"Good Times at Home." Mary Pozzi.

October 30—"Community Recreation." Mary Pozzi.

A program for Massachusetts 4-H club members is presented each Saturday at 12.20.

Two staff members of the State College will speak from WGY, Schenectady, N. Y., during October. A. M. Davis will discuss "Winter Care of Ornamentals," on October 10, and on October 24, E. W. Bell will tell of "The Auctioneer and the Hen."

Notes

Over four hundred vegetable growers have signed up to support the proposed plans for the establishment of a new produce market in South Boston.

The Brockton egg auction has four hundred and forty-one members, and after one year's operation has paid dividends to its members.

The first export shipment of Massachusetts apples and pears for 1933 sailed from Boston on August 13 for Liverpool. Early apples sold in England this season thus far have netted growers about twenty-five cents per box more than the same quality sold in Boston.

Milk Dealers Bonding Law

On July 18 Governor Ely signed the bill making it a law that all dealers in milk and cream must apply to the Commissioner of Agriculture on or before January 1, 1934 for a license. The license year begins March 1st. Details of the law may be secured from the Commissioner of Agriculture.

Fall Fancies

Ruth Emerson
Instructor in Foods

Are your preserve shelves all filled with summer canning? And do you think that now the summer is over there is no chance or need to continue your canning? I imagine most housewives will answer that this is the busiest time of all because we must not only finish up the canning but start our jelly-making and pickling.

Get your grapes for jelly before they are too ripe because there is more pectin in underripe fruit. Pectin is the substance that makes the jelly "jell" and we find it in under-ripe grapes, and near the seeds, cores and skins of many varieties of apples. Quince is rich in pectin and is good alone or in combination with other fruit. Don't be afraid of the commercial pectin.

Grape conserve is easy to make—and so good to eat:

1 small basket grapes. Cook soft with little water and strain. This should give 3 pints of juice. If not, add water.

3 pounds sugar; 1 pound chopped raisins. Cook 20 minutes. Add nuts (1 pound) after it is cooked. Lemon and orange add to flavor.

Spiced grape jam is particularly good with meats:

To 4 pounds of grapes after picked from stems, add 4 pounds sugar, 1 pint vinegar, 1 tablespoon clove, 1 tablespoon cinnamon. Pulp grapes after washing and cook pulp until seeds are all free in their own juice, strain and mix with grape skins, sugar, vinegar, and spices in bag. Cook slowly until thick, about one hour, and seal in jars.

Red pepper jelly is not really jelly and hardly belongs with pickling recipes but it is a good thing to have on your shelves:

12 red peppers chopped fine; 1 dessert spoon salt; let stand over night. Drain. 3 cups sugar; 2 cups vinegar; simmer on stove until it thickens a little (not quite as thick as ordinary jam) perhaps 2 or 3 hours.

Pepper relish is an old favorite with many but it is so easy to make and so satisfactory that maybe it is worthwhile to repeat it.

1 dozen green, one dozen red peppers, sweet; 3 large onions chopped fine. Chop up and cover with boiling water. Stand 10 minutes. Drain. Cover again with water and let come to boil. Stand 10 minutes. Drain carefully and add 3 tablespoons salt; 1 quart vinegar; 2 cups sugar; cook 15 minutes and pack in jars.

Potsfield pickle may be new to some and it is particularly popular with the students at Essex Aggie:

3 lbs. green tomatoes; 3 lbs. ripe tomatoes; 1 small cabbage; 1-2 cup salt; 3 red peppers; 2 bunches celery; 1 qt. onions chopped. Let stand overnight and drain. 3 pts. vinegar; 1-2 tablespoon mustard seed; 2 lbs. su-

Century of Progress Tour

October 14

In response to numerous requests, the Farm Bureau has decided to sponsor a tour to Chicago and the Century of Progress Exposition as a service to members and their friends. By travelling in a large body extremely low rates have been secured. Arrangements have been completed with Mr. R. D. Fuller, District Passenger Agent of the Boston and Albany R. R. for a remarkable all-expense tour of six days which will cost less than \$40 from all B. & A. stations in Massachusetts.

The Massachusetts tour will be under the direction of the Agricultural Department of the New York Central Lines, which has been specializing in the handling of farm parties for many years and has been particularly successful in arranging very attractive tours this year to Chicago. A representative of the Department will devote his entire time to the Massachusetts tour and will be available to explain the tour at meetings and to give motion pictures in all parts of the state.

Here is an opportunity of a lifetime: the World's Fair, Niagara Falls, 2000 miles of transportation across a most interesting section of our country, excellent meals, a trip on a luxurious Great Lakes steamer, all this and more. Last month a Connecticut group conducted a similar tour and all were so enthusiastic and delighted with the tour they have urged their state organization to promote another in order that their neighbors may get the benefit of the service.

Home Nursing

The fall groups in Home Nursing, under the direction of Mrs. Mary E. Roundy, R. N., of the School staff, started the week of September 18 in the following towns: Peabody, September 19; Rowley, September 20; Ipswich, September 22. Anyone wishing classes in this project is asked to notify Mrs. Mary M. McIntire, Home Demonstration Agent.

gar; 2 tablespoons mixed wholespice tied in a bag. Cook together about two hours, pack in jars, and seal.

Remember to can lots of tomatoes if you have them in your garden, so that tomato juice cocktail can be used frequently during the winter. You may can your tomatoes plain and season them on serving, or can them all ready for use. Have you tried to make cocktail directly from raw tomatoes? It is surely at its best this way. Grind the tomatoes in meat chopper and strain. For seasoning, lemon juice and salt and pepper are excellent. Do try the real raw tomato juice if you have any tomatoes left.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 14

HATHORNE, MASS., OCTOBER, 1933

NO. 10

The Fall Clean-up in the Vegetable Garden

Garden sanitation is the weapon to use right now in our fight to control insect and disease pests. It is quite an improvement over the old "stitch in time" adage for every insect killed this fall will decrease the next spring's probable crop by many times the proverbial "nine."

Consider for example these insects that pass the winter in the soil: carrot rust fly, Colorado potato beetle, white grubs, and squash borer; or these that hibernate in, on or under trash and the remains of crops left in the garden or the grass around its edges; cabbage worm, root maggot and aphids, potato leaf hopper and flea beetle, European corn borer, cucumber beetle, squash bug, onion maggot, sparagus beetle, onion thrips, and Mexican bean beetle. This same crop refuse may harbor the resting stage of a variety of injurious plant diseases as well.

Obviously our clue is to destroy as many of these pests as possible this fall by raking up and burning all crop remains, by plowing it under or by burying it deeply. A continuing reward for our efforts aside from a reduction of insects and diseases next year will be the more pleasing outlook the garden area will afford through the long winter months till planting time comes again. Surely the "fall clean up" is well worth while.

A. L. Dacy,

Instructor in Vegetable Gardening

1932 Costs of Producing Apples in Massachusetts

The above is the title of a report by Roy Moser of the State College, based on records kept by twenty-two fruit growers of Massachusetts.

These growers were better than average, hence these costs are likely lower than average. Costs including growing, harvesting, grading, and packing averaged \$118.38 per acre; \$2.41 per tree; and 53.4 cents per bushel to produce apples. Man labor was the largest item at 42 per cent.

Bristol, Essex, Franklin, Hampden and Hampshire Counties were included in the study. These twenty-two orchards averaged thirty-two acres each, but nearly half of them averaged 10.6 acres.

Milk Grades

The Milk Regulation Board is calling a second public hearing at Room 136, State House, Boston, on October 26 at 2.00 P. M., for the purpose of getting further information relative to making rules and regulations and establishing grades of milk.



Gold Medal Fruits

At a fall fruit and vegetable show held early in October at Horticultural Hall, Boston, this School was awarded a gold medal for a special fruit display. Fruits shown in this exhibit were grown in the School orchards and special fruit nursery where more than five hundred varieties have been experimented with and grown each year for the past several years. Many of these fruits originated at the Geneva Experiment Station in New York, also represented, and a gold medal winner at the recent horticultural exhibit.

ATTENTION ALUMNI
Annual Banquet and Dance
November 28, 1933
Business Meeting
5:30 P. M.
Fifth, Tenth, and Fifteenth
Reunions
Classes of '28, '23, '18

Graduation

The annual graduation exercises for the eighteenth class will be held on Tuesday, November 28, 1933, at the Peabody Institute, Danvers, at 2:00 P. M.

A Word to the Wise Beekeeper

Full honey flow usually ends with the first killing frost. A few sheltered locations along the north shore may still have some golden rod and wild asters in bloom until nearly the first of November. This is not true, inland. If swarms have not been checked up, this should be done at once and a feeding of heavy sugar syrup, two parts sugar to one part water, made, to make up the deficiency of stores. (Good strong colonies should have at least seventy-five pounds of stores.)

Winter Insulation

Winter insulation may be applied at any time after the colonies have been checked for winter. The purpose of insulation is to conserve the energy of the bees. Wooden packing cases are expensive but enduring. Make them large enough so that there is a six to eight inch space for leaves all around the sides and top of the hive. Sheets of homosote or celotex may be tacked onto the hive and covered with slater's felt.

The colonies should be raised at least six inches from the ground and this space filled with leaves or other packing material. Be sure to leave an entrance space of three-eighths of one inch. It is generally considered best to avoid moisture in the hive and leave the bee escape open in the inner cover.

For best results the packing should be done before the ground freezes.

G. A. Meigs,
Instructor in beekeeping

Apple Storage

Three principles, strictly obeyed, will insure safe storage of apples during the winter months.

Stored in a cellar, apples require a cool, moist temperature of approximately 32 degrees F. High humidity of 80-90% of moisture in the air, achieved through sprinkling the floor is the second essential. A darkened condition is the remaining insuring function for the safe storage.

These apply to small or large quantities of apples.

Football Results

October 6—Malden Seconds 0, Essex Aggies 26; October 12, Salem Seconds 7, Essex Aggies 0.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

A MONTHLY PUBLICATION
SUBSCRIPTION 25c PER YEAR

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Treasurer, Ned Harris	Ipswich
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President, Thomas Smith	Methuen
Secretary, Stephen Dyer	Lawrence
Eastern Massachusetts Society of Beekeepers	
President, George A. Meigs	Hathorne
Secretary, Frank H. Coville	North Andover

Calendar

October 20—All day field trip, Home-making department.
October 21—Meeting of the Massachusetts Home Economics Association at Homemakers Building.
October 26—Rabbit Breeders' Association annual banquet at Home-making Building.
November 2—Leaders' meeting for Children's Coat-Making Project at this School.
November 28—Graduation Day.

"Green and White"

The editorial board of the "Green and White" announces its intentions of having two issues of the School publication in December and March. Members of the board, recently elected, are:

Editor in Chief: Roberta Thompson.
Assistant Editor: Gilbert Weed.
Sports Editors: Irene Burbeck; Walter Licht.

Alumni Editors: Genevieve Pasquale; Kenneth Nunan.

Art Editors: Helen Ehrlich; Augustine Sheehy.

Exchange Editors: Helene Hall; Clinton Spencer.

Joke Editors: Dorothy Lowe; Ernest Tarbox.

Business Manager: Anna Burton.
F. F. A. Reporters: Chester Ellis; Hartwell Daley.

Fall Fashions

The dress you make now should be high at the neck (modified to suit the type), wide, but not too wide across the shoulders, full in the bust, moulded over the hips, with a straight, long skirt.

For daytime wear, hems are nine inches from the floor; for formal daytime, to the ankle; for evening, to the floor; sometimes a tiny train is used.

Fabrics

Fabrics are varied. They are soft and drapery. Wools are rough, nubbly, diagonal, ribbed, crepe and suede-like, and include tweeds and homespun. Lots and lots of satin and velvets are used.

Colors

Dark shades like Oxford gray, taupe, mahogany, cinnamon, and wine are being used, relieved by brilliant accents in trimmings or accessories.

Sometimes the accents are in solid colors used as blouses, scarfs and bags, matching parts of the dress. The accessories make the costume.

The popular two-piece styles with contrasting color and fabrics show modified top sleeve interest, back closings, snug waistlines with belts and sashes, and skirts with pressed pleats.

Myrtle Dunn,
Clothing Instructor

NATIONAL BEE WEEK
NOVEMBER 12-18

Homemaking Notes

On October 3, Miss Ethel Moore, Educational Manager of the home-making school, was a guest speaker at the First Baptist Church, Beverly. Laboratory assistants, Janice Wray and Bernice Ogden supplemented the talk with exhibits of their summer project work.

Music rehearsals started in the homemaking department on October 16.

On October 18 Miss Verna Clark and Mrs. Edith Morrill, instructors in this department discussed homemaking problems at the West Gloucester Grange.

On October 24, Miss Margaret Harris, instructor in art and interior decoration, will speak at the Merrimac Women's Club.

Girls in the homemaking department are in the process of forming a students' home economics association to be affiliated with the state organization. The following officers have been elected: President, Irene Burbeck, Salem; Vice-president, Madeline Featherstone, Hamilton; Treasurer, Vera Dixon, Andover; Secretary, Dorothy Thorn, Saugus; Executive Board, Ruth Covell, North Andover; Ruth Hull, Saugus; Rita Pasquale, Lynn; Millicent Ford, Lawrence.

The Senior girls are renovating coats in their clothing classes for welfare work.

News of the School At a Glance

October 11

At a special assembly, Albert Richardson of the Reading High School and a member of the Future Farmers of America Association, delivered an address "Why Be a Farmer?"

On November 20, student Richardson will represent Massachusetts with this same address at the third annual public speaking contest to be held at Kansas City.

October 13

Student Thomas Swiniarski was awarded a silver medal by the Massachusetts State College at a fruit-judging contest held there on this date. Student Swiniarski placed second individual, and the Essex County team placed second in competition with other county agricultural schools and departments of high schools. Albert Doggart was also the recipient of a silver medal, placing second in a plant identification contest, and Chester Ellis took a third medal, winning second place in livestock judging. The Essex teams placed second in plant identification, fourth in milk judging, and sixth in vegetable judging.

Alumni Notes

Virginia Merrill, class of 1933, of Danvers, is taking evening courses at the Salem Commercial School.

Kathryn Ingoldsbys, class of '32, of Salem, is now a student at the Chamberlain School of Art, Boston.

Ellen Collins of Newburyport, and a graduate of this year's class, is studying at the Boston Trade School.

Marion Burkhardt of Methuen has returned to this School as laboratory assistant in the clothing divisions.

Dorothy Williams, '33 of Lynn, is furthering her studies at the Lynn evening High School.

Fred Walker, Jr., '27, who graduated from Kansas State College this year has secured a position as inspector for the United States Department of Agriculture in the so-called Gypsy Moth "Barrier Zone" with headquarters at Greenfield, Mass. At the present, Mr. Walker is stationed at Yalesville, Connecticut.

Marriages

Ralph Broughton, class of 1934, of Peabody, to Elvira Belcher, class of 1933, of Hathorne, on October 6, 1933. They are now residing on Maple St., Danvers.

Lloyd Anderson of Lakewood, Ohio, to M. Priscilla White, a former student, of Peabody.

Peter Pasukonis, class of 1928, to Beatrice Sears of Springfield, October 7, 1933. Mr. Pasukonis is connected with the United Dairies Systems, Springfield.

Report of Essex Dairy Herd Improvement Association

September 1933

Total herds 11.

Total cows on test 215.

No. cows in milk 178.

No. cows dry 37.

Average production per cow 552.2.

Average cost per lb. fat \$.336.

Average butterfat test 3.9.

Unprofitable cows sold during mo—0.

Highest Herds

Herd	No. Cows	Av. lbs. milk	Av. lbs. fat
Mary Flint	10	634.0	24.8
Melville Grey	8	691.5	26.7
John Chadwick	30	561.0	17.8

Honor Roll

Owner	Breed	Name	Lbs. fat	Lbs. milk
Molly Lewis PBG	Basha	56.5	942	
George Hoyt GH	Seavey	46.7	1557	
	Hugh Smith,			Supervisor

State College On Air

Three home economics specialists of the Massachusetts State College will speak from Station WGY, Schenectady, New York, during the month of November. On November 3, Mrs. Harriet J. Haynes will talk on "The Homemaker and Her Time." Two weeks later, Mrs. Ruth D. Morley will discuss "The Children's Christmas," and on November 24, Miss May E. Foley will deliver a talk entitled "Talking Turkey." These talks will be given during the agricultural period of the station, from 12.30 to 1 o'clock on the days indicated.

The regular broadcasts of the State College over WBZ-WBZA, Boston and Springfield, will be presented as usual on Monday, with the Farm Forum at 12.35 and the Home Forum at 1.35 P. M. The schedule of speakers and topics for the M. S. C. Farm Forum follows:

November 6, C. J. Fawcett, "The Feed Situation for 1934."

November 13, R. E. Moser, "The Outlook for Massachusetts Agriculture."

November 20, R. W. Donaldson, "Results of the 300 Bushel Potato Club."

November 27, F. H. Branch, "Economics in Winter Feeding."

The Home Forum speakers and their topics are:

November 6, Mrs. Annette T. Herr, "What the Home Economics Extension Service Does."

November 13, Mrs. Ruth D. Morley, "Child Development."

November 20, May E. Foley, "Better Food at Less Cost."

When Should They Be Cut?

"Studies of Feed Value of Early Hay" is the title of a recent bulletin-circular 41 of the New Hampshire Experiment Station. These results indicate that early cut hay carries a greater percentage of protein and more protein per acre than later cuttings. To be of most value for dairy cows, hay should be cut before the period of bloom. This means starting haying before June 15th.

Dried Brewers' Grains

Because of the abundance and low price of dried brewers' grains, dairymen have recently become interested in this product.

Professor E. S. Savage of Cornell University recently made the following statements in the Dairymen's League News:

"Feeds and Feeding", by Henry and Morrison gives the average analysis of dried Brewers' grains as follows:

Water 7.55%; ash 3.5%; protein 26.5%; fat 6.9%.

"The total digestible protein is 21.5% and the total digestible nutrients 65.7% or 1314 pounds of total digestible nutrients in one ton."

"At present prices, the cost of total digestible nutrients in one ton of dried brewers' grains per 100 pounds is \$2.00, which is very favorable when we compare it with other articles. Dried beet pulp is also on the market but it does not contain quite the digestible nutrients as dried brewers' grains."

"At the same price per ton I would prefer to buy dried brewers' grains and wet them to use as a succulent feed than to buy dried beet pulp."

For those who have no silage, dried brewers' grains at the rate of four pounds dry per day per cow is about right. When dry these grains absorb approximately four times their weight of water. It is well when feeding wet, to use a 16% grain ration. The more brewers' grain fed, the less hay is needed.

The crude protein in dried brewers' grains is 26.5% or 26½ pounds in 100. To get the same amount of protein the following amounts would be needed:

Choice cottonseed meal	60 lbs.
Corn gluten meal	74 lbs.
O. P. Linseed oil meal	78 lbs.
Corn gluten feed	104 lbs.
Middlings	155 lbs.
Bran	165 lbs.
Corn	276 lbs.
Oats	213 lbs.
Wheat	214 lbs.
Barley	230 lbs.

Rabbit Breeders' Association
Annual Banquet
Homemaking Building October 26

New Bulletins

(Obtainable through Massachusetts State College, Amherst, Mass.)

Extension Leaflet No. 71—"Eat More Vegetables" by May E. Foley.

Extension Leaflet No. 100 C—"Cherries", Spray Chart (Revised).

Extension Leaflet No. 100 B—"Peaches", Spray Chart (Revised).

Extension Leaflet No. 100 F—"Pears", Spray Chart (Revised).

Extension Leaflet No. 100 A—"Grapes", Spray Chart (Revised).

Extension Leaflet No. 100 E—"Plums", Spray Chart (Revised).

"Cost of Producing Apples in Massachusetts in 1932" by Roy Moser.

Special Circular No. 18—"Storing Home Vegetables."

Farmers' Bulletin No. 1687—"Removing Spray Residue from Apples and Pears." (Obtainable through United States Department of Agriculture)

Radio Health Programs

Health messages sponsored by the Public Education Committee of the Massachusetts Medical Society and Massachusetts Department of Health will be broadcast on Fridays at the usual hour, 4.30 P. M. through the courtesy of Station WBZ.

The following subjects will be discussed during the month of November:

November 3—Danger Signals in the Rheumatic Infections of Childhood.

November 10—Communicable Diseases in the Schools.

November 17—Illness and Character.

November 24—Heart Disease in Middle Age.

"Farmers of The Sea"

The \$100,000,000 fish industry of Massachusetts will be presented in a new and graphic form at the coming Prosperity Show at Mechanics Hall in Boston, the week of October 23. The exhibit will be staged by The Massachusetts Department of Agriculture which was given special permission by the last legislature to work for the fish industry along with its work for farmers. The Department is starting its work for this great industry with this special exhibit and plans to carry out other educational features.

Dr. A. W. Gilbert, State Commissioner of Agriculture, says that this exhibit is a forerunner of a definite program to assist the fish industry which is being mapped out as the result of the new law. "The fish industry is a tremendous asset to the State", he said, "It has been so from the earliest days. In all these years the fish industry has had comparatively little done for it by the state, but the action of the legislature opens the way to give our farmers of the sea some definite and concrete help."

Oven Dishes For Autumn Days

These crisp autumn days, the men and growing boys and girls of the family seem to have enormous appetites, and want something more hearty than summer dishes. This is the most satisfactory time of year for the housewife to plan and prepare meals, because of the abundance of good fresh vegetables and fruits just harvested. It is a good time to prepare casserole and other oven dishes. A great saving of fuel is effected if a whole oven meal is planned. Some suggestions for oven menus are:

Pork and Vegetable Casserole
Lettuce Salad
Graham Bread and Butter
Baked Custard
Milk for Children

Pork and Vegetable Casserole
1 lb. lean fresh pork 2 carrots
3 tablespoons flour 2 onions
3 potatoes 1 cup tomatoes
1 1-2 teaspoons salt

Use sliced fresh ham or shoulder or any other lean pork. Cut into small pieces and fry until brown. Dredge with flour, add salt, and allow flour to brown slightly. Add enough water to make thick gravy. Slice vegetables thinly and arrange in layers with meat gravy. Pour tomatoes over top, cover and cook in moderate oven one hour with cover. Remove cover and cook 15 or 20 minutes longer. When cover is removed, a cup of peas may be added if liked.

Ham Loaf With Prunes and Potatoes
Beet Salad
Bread and Butter
Yum Yum Pudding
Milk for Children

Ham Loaf with Prunes (or Pineapple) and Potatoes

1 lb. raw cured ham 1 cup bread
1-4 lb. fresh lean pork 3-4 cup milk
1 egg

Grind ham and pork together twice. Mix all ingredients for loaf together thoroughly. Put into loaves and cook in roasting pans with a little water for about an hour. After the first half-hour place sweet or white potatoes around the loaves. During the last 10 or 15 minutes place cooked prunes or slices of pineapple over top. Serves 6.

Yum Yum Pudding

1 egg well beaten 1-2 tea. cinnamon
3-4 cup brown sugar 1-2 tea. salt
1-4 cup molasses 1 quart milk
1 cup rolled oats
3 medium-sized apples

Slice apples into buttered baking dish, mixing 1-4 cup sugar with them as they are being sliced. Mix remainder of sugar with other ingredients and pour over apples. Bake 1 hour in slow oven. Serve with top milk or thin cream. Two cups of stewed pitted prunes may be used in place of apples. Use only 1-2 cup sugar with prunes.

New Fall Project

The new fall project, children's coat-making, is now well started in this county. Leaders are meeting regularly with Mrs. Esther Cooley Page to learn, by steps, the methods of making coats from old or new materials. Efficient ways of making serviceable and attractive pockets, loops, and button holes are by no means the least of the details which are being taught.

Upon acquiring instruction, the leaders relay their information to community groups. This particular project seems a valuable one for the present time.

Communities carrying it are: West Andover, Middleton, Danvers, Saugus, Beverly, Essex, and Hamilton.

Fun At Home

(One of a series of articles provided by Miss Mary Pozzi of the Massachusetts State College)

Cane Ringing

A game does not need to be extremely difficult to make it good fun. One good simple game is played by suspending a bracelet or a teething ring or curtain ring in mid-air in a doorway. This can be done by hanging it on a piece of string from the top of the door. Then take a cane or broom handle or some other kind of stick; stand back five or ten feet and walk toward the ring and try to put the stick through the ring while walking. It isn't as easy as it sounds.

Or, if you get too good at that game, try doing it blindfolded.

Ball Bounce

Anybody can bounce a ball, but it takes some skill to know just how a ball of a given size and weight is going to bounce. Collect at least five balls of different sizes, shapes, and weights, such as a golf ball, tennis ball, ping pong ball, jackstone ball, etc. Set a small box on the floor and bounce the balls so that they drop in the box on the first bounce. Give each ball a value, depending on the difficulty involved in making it bounce accurately, and keep track of the score. A tennis ball may be easy to bounce into a box, but try a football and see where it lands.

Round About The County

October 20—Leader training group under the direction of Mrs. Esther Cooley Page at this School.

October 25—Furniture Renovation, West Gloucester Grange Hall.

October 26—Children's Coat-Making Project, Hamilton Community House.

October 27—Children's Coat-Making, Newbury, Grange Hall.

November 1—Furniture Renovation, West Gloucester, Grange Hall.

November 2—Project Leader's Group

Cooking To Conserve Values

1. VEGETABLES

Green, yellow, and orange color in vegetables usually indicate the presence of certain vitamins. Heat tends to destroy some vitamins, and when vegetables are cut up and cooked in water some of the minerals dissolve. Chemical changes due to cooking also affect flavor, color and texture. The science of cooking vegetables, says the Bureau of Home Economics, seeks to conserve all possible food values and at the same time give "appetite appeal."

Slow baking in a moderate oven comes first as a means of conserving food value in cooking vegetables. Potatoes, squash, cucumbers, tomatoes, and onions, for example, contain enough water to form steam and keep them moist, and the skin holds in the steam. In casserole cooking the earthenware taker, or heavy glass container, with a close-fitting lid, takes the place of the vegetable skin by holding in the steam and juices.

We can steam, boil, or pan vegetables that cannot be baked. Steaming conserves food value, but spoils the attractive green color of some vegetables. It is satisfactory for carrots, squash, sweet-potatoes, parsnips, and wax beans.

Boiling requires less fuel than baking, but greater precautions are necessary to prevent loss of food value. Use a small quantity of water. Have it boiling when you put the vegetable in. Cook just long enough to make the vegetable tender.

Green vegetables lose their greenness very easily, so for spinach, Brussels sprouts, green cabbage, green snap beans, peas, turnip tops, and kale leave the lid off the kettle. This allows volatile acids to escape and preserves the green color. Do not use soda to intensify greenness. It destroys some of the vitamins.

Panning is an excellent and economical method for cooking vegetables. Cut the vegetable into small pieces and cook with a little fat in a flat covered pan. The water that cooks out evaporates so there is no extra liquid, and the cooking time is so short that the loss of vitamins is probably slight.

at this School with Mrs. Page directing.

November 7—Children's Coat-Making Project, West Andover.

November 8—Children's Coat-Making, Essex, Congregational Church.

November 10—Children's Coat-Making, Newbury, Grange Hall.

November 15—Furniture Renovation, West Gloucester, Grange Hall.

ANNUAL GRADUATION

Tuesday, November 28

Peabody Institute

Danvers

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 14

HAITHORNE, MASS., NOVEMBER, 1933

NO. 11

Science Day

On Friday, November 10, the eighth annual Science Day was observed with the largest display of feed, herbarium, poultry, seed, propagation and wood exhibits ever shown at the school.

After a scientific talk delivered by Daniel Tower of the New England Telephone Company, first awards were made to the following students:

Ernest Thayer, Lynn; Richard Colby, Haverhill; James Gardella, Haverhill; Alexander Dion, Salem; Anthony Dichirico, Swampscott; Rene Deloge, North Andover; Kenneth Snell, Lynn.

Second prize winners were: Gordon Morrison, Lawrence; Alfred Caproni, Lynn; Fred Basile, Haverhill; Arthur Purdy, Danvers; Albert Nunan, Saugus; Richard Gilman, Peabody; Gilbert Weed, Lynn.

Third prizes were awarded to: Herbert Amidon, Saugus; James Smith, North Andover; Roger Wheaton, Manchester; Chesley Norman, Salem; Archie Nimmo, Methuen; Donald Cail, Danvers; Ralph Demuth, Melrose; Lucille Legasse, Haverhill.

Awards were also made to representatives of each class. Freshmen ribbons went to Merle Graffam, Lynn; Anthony Dichirico, Swampscott; Leonard Best, Lynn. The following Sophomores were winners: Richard Colby, Haverhill; Richard Gilman, Peabody; Clinton Spencer, Ipswich. Junior awards went to: Rene Deloge, North Andover; Ernest Thayer, Lynn; Ralph Demuth, Melrose. Senior ribbons were won by James Gardella, Haverhill; Alfred Caproni, Lynn; Kenneth Snell, Lynn.

A sweepstakes prize was won by Richard Colby.

Bauer Prize Candidates

The following girls are candidates for the Mrs. R. S. Bauer prizes awarded each year at graduation, for achievement in homemaking projects:

Marion Bell, Methuen; Marion Burkhardt, Methuen; Elizabeth Akerley, Beverly; Olive Pinney, Danvers; Clara Robinson, Beverly; Nelda Bourdelais, Lawrence; Amelia Grover, Rowley; Bernice Ogden, Newburyport; and Frances Whiteley, Andover.

Candidates for the R. S. Bauer prizes, awarded for achievement in agricultural projects, are:

Arthur Peatman, Andover; Edmund Crossley, Methuen; Ralph Broughton, Peabody; Howard Stultz, Ipswich; Kenneth Snell, Lynn; Chester Dunn, Rowley; Raymond Alley, Lynn; Olin Donnelly, West Newbury; Elizabeth Crosby, Swampscott.

House Plants

Now that the outdoor season has come to a close, and with the approach of winter, the housewife will gratify her desire to work among and care for living plants by maintaining an indoor window garden. In making a selection of plants to be grown in the house, one must necessarily be governed by the conditions of light, temperature, and humidity of the room or rooms in which the plants are to be grown. Of course the prime requisite in the successful growing of all plants is light, and most house plants must be placed in the sunniest windows of the home if they are to thrive. Therefore, a room with a southern exposure should be an ideal one for most plants. Many foliage plants, however, will do quite well in windows that face the east or north, and if only rooms having such exposures are available, one may still succeed with certain carefully chosen plants, which will do well under such conditions. Aspidistra, Anthurium (Spider Plant), Sansevieria, English Ivy, Maranta (Leopard Plant), Helixine (baby's Tears), Holly Ferns, and Boston Ferns are some of the foliage plants which will grow and give good results in east and north windows. The Aspidistra, which is often called Cast Iron Plant, because of its ability to grow under the most adverse house conditions, will live in indirect, or reflected light. In general, though, all house plants, even the foliage types, should have at least two hours of direct sunlight each day. Flowering plants, like geraniums and begonias need three or four hours of direct light daily through the winter, though, and cannot be expected to bloom well if supplied with less than that amount. A bay window, in a room facing the south, having an even moderate temperature of not over 65 degrees would be the very best place to grow house plants. Hot stuffy rooms should be avoided, as plants, like people require plenty of fresh air and become sleepy in too high temperatures. Avoid drafts on plants though, as they quickly feel the effects of cold air passing suddenly over and around them.

One of the chief obstacles to the successful growing of plants in the living room of the modern home is the lack of humidity in the air, and too dry an atmosphere probably causes most failures with house plants in general. While it is hardly possible to provide sufficient humidity to meet the requirements of plants grown in the window garden, various artificial means of supplying the air with mois-

(Continued on page 3, col. 3)

The Current Dairy Market Situation

Any consideration of current dairy markets must necessarily take into account the developments which already have taken place and which are likely to take place as a part of the Federal program of agricultural adjustment. There has naturally been a widespread interest in this since milk and its products were designated in the Agricultural Adjustment Act as basic commodities. At the moment, the attention of dairy interest centers particularly around the proposed Government purchasing of butter. Announcement has recently been made of the formation of the Dairy Marketing Corporation, which is an industry-sponsored organization set up as a clearing house to handle surplus dairy products in cooperation with the Secretary of Agriculture. Butter secured by the corporation will be purchased by the Secretary of Agriculture and will in turn be distributed to needy unemployed through Federal relief agencies. Information is not yet available regarding the quantities to be purchased, nor the prices to be paid. The purchasing of this butter is to be done pursuant to a provision of the Agricultural Adjustment Act which states that the proceeds derived from processing taxes are made available for expansion of markets or removal of the surplus of agricultural products.

Dairy Bonding Law

Preliminary steps toward putting into effect the bonding law, passed by the last session of the legislature and designed to protect farmers from losses due to failure of dealers to pay them for their milk, are being taken by the State Department of Agriculture. The law provides for an annual license issued by the Commissioner of Agriculture, the license year beginning the first of March.

No license will be issued by the Commissioner under the law unless the dealer files a bond or gives other satisfactory evidence of ability to pay his farmers in full for all the milk received from them. The law did not go into effect in time to issue licenses for the year beginning last March but the Department is now getting ready to give the farmers of the state full protection under the bonding law next March.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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Calendar

November 28—Graduation
November 30—Thanksgiving
December 15—January 2—Vacation in homemaking and agricultural departments of the School.
December 25—Christmas

Marriages

Bernice Whittier, class of 1933, to Thomas Caldwell, Saturday, November 4, 1933 in Danvers.

Ruth Carlsen, class of 1929, daughter of Mrs. Theresa Carlsen, Danvers, to Lyman Pevey, son of Mr. and Mrs. John Pevey, West Chelmsford, Sunday, October 29. They will reside in Lowell.

Violet F. Darling of Fulton, New York, to Robert Russell Lewis, '25, Saturday, November 11. Mr. Lewis is now employed by the Davey Tree Expert Company at Atlanta, Georgia.

Engagement

Miss Beatrice Elizabeth Dupree, class of '27, of Brockton, to Woodrow Wilson Dinsmore, 18 Florence Avenue, Haverhill. Announced November 4.

Alumni Notes

Bradford Webb, class of 1931 and Stephen Hanson, '22 are touring the west coast through Oregon and California.

Candidates For Graduation

Agricultural Department

At the eighteenth annual graduation exercises of this School, on Tuesday, November 28, forty-seven of the ninety-six candidates for diplomas are in the agricultural department. These are:

Raymond Alley, Lynn; Frederick Anderson, Beverly; James Anderson, Lawrence; Robert Bartlett, Beverly; Robert Bolcome, Gloucester; Arthur Bulgaris, Newbury; David Carter, Gloucester; Alfred Cipolla, Haverhill; Nathan Clark, Swampscott; Joseph Cote, Danvers; George Cross, Danvers; Lester Dixon, Andover; Albert Doggart, Lawrence; Olin Donnelly, W. Newbury; Chester Dunn, Rowley; Nathaniel Edmonds, Saugus; Paul Fischer, Lynn; Elmer Flanders, Rockport; Woodrow Follett, Lawrence; Robert Griffin, Saugus; James Hollins, Jr., Methuen; Theron Johnson, Middleton; John Kacharodian, Methuen; George Lambert, Methuen; Ernest Lemieux, Salem; Thomas Mahoney, Danvers; Howard Manning, Reading; George Michelson, Peabody; William Murphy, Lynn; Everett Nelson, Saugus; James Neville, Saugus; Arthur Peatman, Andover; Michael Pickowicz, Billerica; Richard Poirier, Groveland; John Quinn, Peabody; Richard Quinn, Salem; Edward Riley, Saugus; Caesar Rosi, Middleton; Edward Ross, Danvers; George Sowryda, Saugus; Malcolm Spalding, Newburyport; Robert Spidel, Methuen; Ernest Stansfield, Danvers; Hyman Weinstein, Salem; Frank Williams, Danvers; Jack Wong, Salem; Malcolm Skinner, Lawrence.

Homemaking Department Regular Course

Of the forty-nine candidates for graduation in the homemaking department this year, seventeen are students in the regular course, and thirty-two are High School Specials.

Those candidates in the regular course are: Cora Ballard, Middleton; Alma Boswell, Beverly; Nelda Bourdela, Lawrence; Ellen Collins, Newburyport; Eileen Finch, Marblehead; Ethel Greenwood, North Andover; Amelia Grover, Rowley; Mary Long, Lawrence; Irene MacDonald, Salem; Florence MacKenzie, Ipswich; Frances O'Brien, Salem; Bernice Ogden, Newburyport; Katharine Pearson, Newbury; Adaire Townsend, Saugus; Dorothy Williams, Lynn; Janice Wray, Methuen.

High School Specials

The High School Special candidates are: Elizabeth Akerley, Beverly; Lois Allen, Middleton; Minerva Ambrose, Danvers; Edna Belcher, Danvers; Marion Burkhardt, Methuen; Wilma Corliss, Andover; Monica Doyle, Lawrence; Madeline Dullea, Peabody; Marjorie Ford, Salem; Mary Guppy, Danvers; Mildred Hardy, Groveland; Edna Hayward, Lynnfield; Thelma Healey, Salem; Madeline Johnson, Salem; Catherine Lee, Peabody; Jean-

Honor Roll

Homemaking Department

At the close of the first term in the homemaking department the following girls were on the honor roll:

Freshmen: Evelyn Homan, Wenham, H. M.*; Rita Pasquale, Lynn; Freda Peterson, Newbury.

Juniors: Genevieve Pasquale, Lynn; Grace Stansfield, Danvers, H. M.; Roberta Thompson, Lynn.

Seniors: Helen Erhlick, Methuen; Mary Peterson, Salem; Arlene Prescott, Methuen, H. M.; Evelyn Zanni, Lawrence, H. M.

High School Specials: Ruth Bradstreet, Danvers, H. M.; Ruth Covell, North Andover; Eleanor Tucker, Gloucester; Virginia Ryan, Peabody, H. M. * H. M. signifies Honorable Mention.

Poultry Association Elects New Secretary

At the annual banquet held recently in Middleton the Essex County Poultry Association elected J. Stanley Bennett of Hathorne, Secretary of the organization. The other officers remained the same as those of last year.

President Albert Elwell, Jr., Byfield; Vice President, Robert Parkhurst, Buxford; Treasurer, Ellery Metcalf, Saugus; Executive Committee, Dimon Lockwood, Topsfield; J. A. Griffin, Danvers; C. Nelson Hardy, Essex.

A county committee was also elected at the meeting to study the possibilities of an egg auction in Essex County. This is comprised of Homer Rowell, chairman, of Groveland; Alexander Price, West Buxford; J. A. Taylor, Haverhill; George Hooper, Danvers; and County Agent F. C. Smith, Hathorne.

Gifts to Library

The agricultural department library recently received many valuable and interesting books which were presented by Mrs. Mary McIntire, the Home Demonstration Agent, and Mrs. Arthur Nason of Newburyport. Among the gifts are the works of Dickens, Irving and Miller. And of particular historic interest is a copy of Forsyth's Treatise on the Culture and Management of Fruit Trees, printed in 1803.

nette Lemay, Lawrence; Frances MacDonald, Gloucester; Louise McGrath, Newburyport; Virginia Merrill, Danvers; Blanche Merrithew, Saugus; Virginia Morrison, Lawrence; Lillian Ogden, Middleton; Ruth Osborne, Salem; Olive Pinney, Danvers; Clara Robinson, Beverly; Helen Rogers, Lynn; Mary Ryan, Nahant; Helen Trow, Beverly; Phyllis Wadsworth, Saugus; Frances Whiteley, Andover; Helen Wood, Swampscott; Marion Bell, Methuen.

Plow Under or Pull Up

R. H. Allen, director of the Division of Plant Pest Control, has announced that a corps of inspectors will be sent through Essex County beginning December 1, to check up on any violations of the European corn borer law. The law will be definitely enforced this coming season, and reads as follows:

"Section 31A. In any town or part thereof in which an order issued under the preceding section in connection with the suppression of the European Corn Borer shall be in effect, every person in possession of land on which corn of any kind has been grown, shall, not later than December first of the year of its growth, plow, or cause to be plowed the field in which it was grown, so as to bury the stubble to a depth of six inches, or pull up said stubble or cause it to be pulled up and destroy it, or cause it to be destroyed, by burning, and every person having in his possession corn stalks shall, not later than April tenth of the year following that of their growth, completely dispose of such corn stalks by using them as fodder or by burning them. Whoever violates any provision of this section shall be punished by a fine of not less than twenty-five nor more than five hundred dollars."

Lower Fee for Pullorum Disease Testing

The Massachusetts State College announces, through two of its workers, F. J. Sievers, and J. B. Lentz, that the fee for Pullorum Disease Testing of Poultry has been reduced from nine to seven cents per bird for the current season (1933-34.) All poultrymen who have already paid at the higher rate will receive a rebate of the amount due them.

This arrangement has been made because of the desire of the college to assist the poultry industry of the State in the present economic situation, and is a result of conferences recently held between representative poultrymen and college officials.

If the season's trial of a lower fee for testing proves that the program cannot be maintained on the basis of the high standards of past years then the charge per bird must go back to the old rate or the understanding as to the work being self-supporting must be changed so that there will be no misunderstanding as to who is responsible for the rates fixed for testing.

The representatives of the poultry industry and college officials in attendance at the conferences were in agreement that the high standards of the present testing program should by all means be maintained, and this the control laboratory intends to do.

Roger Lewis, class of 1925, left recently for Colorado where he will reside until spring.

Farmers To Sell Apples For Relief

The Federal Relief Administration through the state and local county offices, has appropriated \$25,000 for the purchase of apples from needy Massachusetts farmers to be distributed through welfare agencies.

This fund will be administered by Dr. A. W. Gilbert, Commissioner of Agriculture and the Massachusetts Fruit Growers Association has been asked to aid in the work. Apples must be of "B" grade 2 1-4 inches in size, or better, and must be delivered to the nearest welfare station specified. The price paid will be forty cents per bushel, container to be returned to the owner. Apples must be free from maggot.

This is an opportunity for farmers who are badly in need of help, who have borrowed from the Federal government, who can not sell their apples to advantage, and who have some high quality small size apples. If interested get in touch with your County Agent, F. C. Smith, Hathorne.

Dairy Products

Cow Numbers Near a Peak

Cattle production in this country has been in one of its periodic upswings ever since 1928. The total number of cattle has now reached so high a point that the rate of marketing has increased, and it is not unreasonable to expect that the turning point in numbers may be reached within a year or two. On June 1 of this year the number of milk cows on farms was about 2.3 percent above the number a year earlier, and about 14 per cent above the number in June 1928.

Since last spring there has been a sharp increase in the number of cows marketed and in the slaughter of calves, both of which indicate a slowing up of the rate at which dairy herds are increasing. On the other hand, sales of butterfat are at present about the only sources of income on many farms in areas which were hit by drought the past season; also, more cows, formerly kept only for beef production, are now being milked.

Hay Grading School

The County Agent, Francis Smith, of the Essex County Agricultural School, is arranging for a hay grading school providing there is enough interest. So many times dairymen have purchased hay in car loads as specified grade, only to find on delivery that it was not up to grade specifications.

Accordingly, Professor C. J. Fawcett, specialist of the Massachusetts State College, is arranging for a U. S. haygrading expert to come to Essex County for a one day school. This expert will show by models the different grades so anyone may become

State College Announce December Radio Schedule

The schedule of radio talks which will be presented by men and women of the Massachusetts State College over Stations WBZ-WBZA during December has just been announced. The M. S. C. Home Forum will be heard three times during the month, on Monday afternoons at 1.50. On December 4, Miss May Foley will discuss "Milk Products in Your Meals." The following Monday, December 11, Mrs. Ruth D. Morley will continue a monthly series she has been presenting, dealing with child development. Aronld M. Davis, horticulturist, will be the last speaker of the year on the Home Forum program. On December 18, he will talk on "House Plants and Their Care."

The Farm Forum program is presented each Monday noon at 12.20. The speaker on December 4 will be W. H. Thies who will suggest "Five Things To Do In the Orchard This Winter." The speaker on December 11 will be R. B. Parmenter, who will talk on "Income from the Farm Wood Lot." The final speaker of the year, on December 18, will be F. H. Branch, who will talk about "Taking an Inventory of the Farm Business."

HOUSE PLANTS

(Continued from page 1, col. 2)

ture will aid greatly in maintaining a healthful atmosphere for both plants and people. Humidifiers placed around the rooms are useful, but the air directly around the plants may be kept constantly moist if the pots are set in shallow trays or saucers which contain a sufficient amount of pebbles to raise the pots out of the water. The water should always be kept in the trays. The evaporation of the water in the trays or saucers will keep the air in the immediate vicinity of the plants moist at all times. Never should the water in the containers reach the level of the bottom of the pot, and if possible, one-half inch or more of pebbles should protrude above the water. One must be constantly on the watch for pests, as plant lice, white fly, and mealy bug are ever ready to attack and weaken the vitality of the choicest specimens. Lemon oil is an excellent all around spray for house plants, and is recommended not only because of its effectiveness, but also for its agreeable odor and ease of preparation.

Care for your plants as carefully and faithfully as you would your canary, pet cat or dog, or other living things, and the joys and pleasures of indoor gardening will be found to rival those of the outdoor garden.

Harold C. Stevens

quickly familiar with them.

Anyone interested in this hay grading school should write a card to County Agent F. C. Smith, Essex County Agricultural School, Hathorne.

How and What About The House

The following questions and answers are taken from the correspondence of extension specialists in home economics at the Massachusetts State College.

"What furs are most durable?"

(Answered by Mrs. Esther Cooley Page, clothing specialist.)

"Since no two skins are alike, and some people take better care of their furs than others, it is impossible to list furs in the exact order of their durability. Otter, beaver, Alaska seal, mink, skunk, fisher, raccoon, kimmer, Persian lamb, natural muskrat, dyed muskrat, Russian sable, kolin-sky, and leopard are suitable for hard long wear. We must keep in mind, however, that a first grade skin of a less durable type of fur will often wear longer than a poor grade of a harder fur. Deal with a reliable merchant who knows his furs and can advise."

"Is it safe to use liquid from canned vegetables?"

(Answered by May E. Foley, nutrition specialist.)

"The liquid from canned vegetables is not only safe but valuable. Never throw away the liquid from any vegetables, whether they are freshly cooked or canned. It contains minerals and vitamins. Sometimes half of these substances originally in the vegetables will be found in the water surrounding them."

"What are Manchurian wolf, Hudson Bay seal, Laskin lamb, Laskin seal, vicuna, Sitka fox?"

Manchurian wolf is dyed Chinese dog; Hudson Bay seal is dyed rabbit; Laskin lamb is a processed sheepskin; Laskin seal, dyed rabbit; Vicuna belongs to the camel family and is found in Peru and Bolivia. Sitka fox is an improper name for dyed red fox.

"What do you mean when you talk about a 'protective diet'?"

"A protective diet is one which contains plenty of minerals and vitamins; in other words, a diet which protects against such diseases as rickets and scurvy. You can find these necessary minerals and vitamins in milk, butter, cod liver oil, vegetables, fruits and whole cereals."

"Is it allright to cook vegetables in aluminum pans?"

"Certainly it is allright. Cooking in aluminum has no harmful effect on vegetables or other foods. Since aluminum is one of the important mineral elements used by the body, even if tiny particles of the aluminum did get into the food during cooking (which is very unlikely) they would do no harm."

"What is the value of a clear soup in the diet?"

"A clear soup has very little nutritive value. It is stimulating to the flow of digestive juices, and so whets the appetite and aids digestion. A clear soup is always best before a hearty meal."

Children's Coat Exhibit

(Talk by Mrs. Esther Cooley Page)

An exhibit of children's coats made by the members of the children's coat-making project will be held at the Beverly Health Center, Wednesday, December 20 at 3 P. M.

Mrs. Esther Cooley Page who has conducted the coat making project at Hathorne will be present to give one of her interesting and helpful clothing talks.

Coats will be on exhibit from both Mrs. Page's and Mrs. McIntire's groups, which include Beverly, Danvers, Middleton, Sangus, Essex, Hamilton, Newbury, West Andover, and Amesbury.

Come and bring an interested mother.

The children's coat-making project will continue through the months of December, January and February. Any communities interested in starting the project will please notify Mrs. Mary M. McIntire at the Agricultural School.

Cod Liver Oil

May E. Foley, Extension Nutritionist

"Shall we give our children cod liver oil?" "At what age should cod liver oil be begun?" "How much do you recommend?" These and other questions are being asked at this time of year.

When the days are short and the sun's rays are not very effective, it is desirable to give cod liver oil. We begin with the young baby at three weeks. Give him five drops the first day and gradually increase until at three months he is getting one teaspoon, at six months, two teaspoons, and at nine months, three teaspoons. It is well to give all young children three teaspoons daily during the winter months, and even older children and grown-ups profit by its use in the winter time.

Cod liver oil is valuable for two vitamins which it contains, A and D. "A" helps the body to resist colds and other infections of the nose, throat and lungs and also of the digestive tract. "D", the sunshine vitamin, helps build and repair bones and teeth.

Buy a good standard brand of oil, one which has the vitamin units plainly marked on the package. Give cod liver oil concentrates, emulsions, tablets and viosterol only under the doctor's direction.

Home Nursing

The fall groups in Home Nursing under the direction of Mrs. Mary Roundy are now being concluded in Peabody, Rowley, Ipswich, and Hamilton. Dr. Lila Burbank of the Department of Adult Hygiene, Boston, will talk to the Peabody group on November 28 and to the Hamilton group on November 22.

Communities desiring spring meetings will please notify Mrs. Mary McIntire, Home Demonstration Agent, Hathorne.

Helpful Hints

Prepared by May E. Foley, Extension Nutritionist

Salt often curdles milk. In preparing cream sauces and gravies, add salt just before removing from the fire.

Save liquid from pickles and use in salad dressing in place of new vinegar. This gives an interesting flavor.

Keep the cod liver oil in a cold place. This will keep it fresh and the flavor is less noticeable when cold. The mouth of the bottle should be washed each time the cod liver oil is poured out. This also helps keep it from getting rancid.

All strong vegetables, such as onions, cabbage, cauliflower and turnips should be cooked with the cover off. The vegetables will have a milder flavor, will be more easily digested and, strange to say, will leave less odor in the house than when cooked with the cover on.

In making fruit cake, pour half the batter in the pan before adding the fruit, and the fruit will not settle to the bottom.

For variety in making cream of tomato soup, substitute minute tapioca for flour. Add one half tablespoon to each cup of milk, and cook in top of double boiler for ten minutes.

Celery tops may be dried, rubbed thru a wire sieve and stored in a jar to be used later for flavoring soups, gravies and dressings. An excellent celery salt may be made at home by mixing these finely powdered leaves with equal parts of salt.

Save your stale Johnny cake or corn bread for dressing. It is excellent with fowl, fish or any meat in which dressing is used. The coarse stalks of the celery or some of the finely chopped leaves add flavor and interest to dressing.

A plain lemon jelly left from dessert may be cut into cubes and mixed with fresh vegetables for a salad. This is particularly good with shredded cabbage and raw grated carrot.

Meeting of Advisory Council

The Advisory Council of the Women's Extension Department held its first meeting of the year on October 10 at the Essex County Agricultural School.

Mrs. Hazen K. Richardson, Chairman of the council presided and Miss Marion Parker, Secretary, read the minutes of the annual May meeting.

Members of the council present were Mrs. Hazen K. Richardson, Middleton; Mrs. Bernard J. Manning, Amesbury; Mrs. George Mitchell, Groveland; Mrs. Franklin Robblee, Salisbury; Mrs. John W. Henderson, West Andover; Miss Marion Parker, Beverly; Miss Verna Payson, State Department of Education; Mrs. Mary Roundy and Mrs. Mary M. McIntire of the Extension staff.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 14

HATHORNE, MASS., DECEMBER, 1933

NO. 12

Farm Insurance

In July, 1932, certain credits on Massachusetts farm insurance which previously had been allowed were withdrawn by placing all market garden farms in the unprotected farm class. These credits had been allowed on policies covering property within a specified distance from a hydrant, for fire extinguishers, for lightening rod equipment, proper chimneys, and other items which contribute to reduce risk.

When this matter was discussed at a meeting of the Executive Committee of the Boston Market Gardeners Association it was felt that perhaps the insurance companies were not as familiar with the typical market garden set-up as they should be and that if certain facts were brought to their attention it might effect a reduction of insurance costs to this class of policy holders. After two conferences with a sub-committee, Mr. Ralph Sweetland, Secretary of the New England Insurance Exchange promised to institute an inspection of some of the vegetable farms this fall and to prepare a report for his board indicating just what constitutes a market garden in the "protected area" and what fire hazards exist thereon. If credits are to be allowed again they will be based upon the findings of the inspectors.

It is the duty of each farmer, therefore, to concern himself at once with this matter. If lightning rods are broken or deranged, they should be repaired or replaced with up-to-date equipment, for unless such bears the Master Label of the Underwriters Laboratories, Inc., no credit will be allowed. Then, too, it appears that insurance authorities have been of the opinion that all barns, including those of vegetable growers, are filled with loose hay or surrounded by other combustible materials. Scattered hay and straw, leaves, excelsior, oily rags and other inflammables should be cleaned up about the place, for only in this way can each contribute to a favorable report of the inspectors to the Insurance Exchange and a consequent lowering of insurance costs. Since one never knows when his buildings are to be examined, it is good business to be prepared for the inspection at any time.

Many market gardeners can charge a considerable proportion of their tax bills to the maintenance of efficient fire departments within their towns. It is only fair, then, that they should benefit by being rated within a protected area of lower insurance costs.

Ray Koon,
Waltham Field Station.



Winter Scene

Essex County

Forests Need Cultivating

A forest needs just as careful attention and cultivation as any other farm crop. This is the essence of a bulletin, "Cultivating the Farm Forest", just issued by the Massachusetts State College, prepared by R. P. Holdsworth, head of the department of forestry at the college.

The care which a farm forest receives depends to a great extent on the use to which the wood shall be put. One woodlot is used primarily for the production of lumber, while another containing the same kind of trees is used for poles and posts. The system of management needs to be different in the two woodlots, in order that the greatest profit be made from each.

The cultivation of a woodlot depends largely upon "intermediate cuttings", that is, cuttings which are made before the final harvest of timber. Some of the different types of intermediate cuttings are weeding or cleaning, to get rid of undesirable trees; thinning; improvement cutting, to remove older trees which are not suitable for lumber; salvage cutting, to make use of wood which otherwise would be wasted; and pruning, to remove lower branches from young trees and encourage the growth of straight trunks free from knots.

All land, insists the State College forester, is not productive forest land. There are considerable areas of poor soils and exposed sites that should be kept in forest for purposes of soil and stream protection, but which will not grow timber on a commercial scale.

Historic Salem Is Again Invaded

On June 18th last, the gardener on the estate of Miss Caroline Emmer-ton, 328 Essex St., Salem, next door to the Ropes Memorial and close by the Salem Witch House, noticed an unusual number of insects in the air.

He soon observed a large swarm of honey bees alighting on a grape trellis. The bees were promptly put in a new hive and all was well. The next day he noticed a swarm in a nearby sweet cherry tree where the foliage was quite dense about eighteen feet from the ground. Not wishing for more bees he left them alone, thinking that they would soon go away.

However, both swarms prospered throughout the summer. Strangely enough the bees were still on the comb and active on December 1 after at least two severe cold spells when the temperature was 20 degrees F.

No swarms were known to exist within a mile of the estate until last summer when a swarm entered a hollow post at the Ropes Memorial. They were removed to a straw skep (hive). These however showed no indication of swarming at June 18th. Without doubt the original swarm contained two queens. One of them, with her followers, deserted the hive in favor of the thick foliage. It is very unusual for bees to make so much comb or to live so long in the open.

G. A. Meigs

UNION AGRICULTURAL
MEETING, WORCESTER,
JAN. 3, 4, 5, 1934

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION
SUBSCRIPTION 25c PER YEAR

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Calendar

December 15—Christmas holidays for homemaking and agricultural departments, extending through January 1, 1934.

December 21—Annual meeting of the Essex County Poultry Association. Supper at 6.30, Georgetown Grange Hall.

December 28—Graduation of Short Unit Classes in Poultry and Dairy Practice at this School. 7.30 P. M.

December 28—Annual business meeting of the Essex County Dairymen's Association in the agricultural building of this School. 8 P. M.

December 29—Annual meeting of the American Association of Economic Entomologists. 1.30 P. M. at Austin Hall, Harvard University, Cambridge.

January 3, 4, 5, 1934—Sixteenth Annual Union Agricultural Meeting, Worcester Memorial Auditorium, Worcester, Mass. Reduced fares on all railroads in New England.

MARRIAGE

Dorothy Jordan, to Douglas Rogers, Byfield, class of 1926, on October 27 at Newburyport.

Cost of Growing Apples

Recent studies of growers' records, by Roy Moser of the Massachusetts State College, show that labor represents 42 per cent of the total cost of growing apples. The overhead in land investment and investment taxes and upkeep is 21 per cent, use of buildings and equipment 17 per cent, while fertilizers and spray or dust amount to only 14 per cent.

The State College has prepared a film showing methods of reducing labor costs. They have also prepared blue prints showing how to make a low wagon from a Ford chassis. (If interested in these, write to the County Agent, F. C. Smith, Hathorne.)

Cash (Actual) Costs Per Bushel	
Fertilizer	\$0.021
Spray or dust	.056
Miscellaneous	.003
Total	.080

Growing costs, exclusive of labor	
Labor, man	.082
Labor, horse	.009
Tractor	.016
Truck	.001
Other equipment	.025
Total other costs "if hired"	.133

Where the grower does his own work and has his tractor the eight cents per bushel will be cash outlay. If part of the labor is hired, four cents would probably cover that.

The cost of harvesting depends largely on the amount of labor, and amounts to approximately five cents if the owner works. The cash outlay could be brought down then to about 25 cents or perhaps less.

How to reduce that labor cost by lower wagons, convenient water supply for spraying, and conveniently located storage houses, will be discussed at meetings this winter.

Alumni Notes

Betty Waters, class of 1933, is employed as a waitress at the Essex County Sanatorium.

Mrs. Catherine Dow Greaney, a former student in the class of 1926, is living at 15 Ridgemere way, Amesbury. She has three daughters, two of whom are twins.

Mrs. S. L. MacDonald of the class of 1927, is living in Edmington, Alberta, Canada, where Mr. MacDonald is employed by the Poole County Graveling Company of Edmington. The MacDonalds have two children, a boy and a girl.

Grace Coleman, class of 1927, is living at 28 Grove St., Merrimac.

Irving Jaquith, class of 1929, formerly connected with the United Fruit Company in Port Antonio, Mexico, and in California, is now residing on Whipple Hill, Danvers, and is employed as greenhouse man and grounds keeper at a Swampscott estate. Mr. Jaquith, since graduating from this School, has taken a summer course in landscape design at Kansas State College and was instructor at the Fitchburg Normal School during a summer session.

Honor Roll

Agricultural Department

Twenty-four and three tenths per cent of the students in the agricultural department were on the first term honor roll. The Seniors were: Fred Basile, Dana Drew, Lucille Legasse, Haverhill; Virginia Larrabee, Sidney Porter, Franklin Edwards, Joseph Scoglio, Beverly; Dora Winchester, Kenneth Nunan, Albert Nunan, Saugus; Robert Wolcott, George Mosse, Peabody; Kenneth Nolan, Ralph Broughton, Danvers; Alfred Caproni, Chester Ellis, Lynn; John Wegzyn, Ipswich; Frank Cutting, Gloucester.

The following members of the Junior class were on the honor roll: Huntington Howard, Ernest Thayer, George Spakas, Philip Hanson, Leo Leonard, Lynn; Vincent Nelson, Hartwell Daley, Salem; Rene Deloge, Andover; Nicky Fiore, Elizabeth Crosby, Swampscott; Victor Pohju, Peabody; Forrest Haynes, Gilbert Wallace, George Nelson, Haverhill; Walter Licht, Lawrence; Joseph Andreas, Beverly.

The Sophomores were: Chester Buczek, Salem; Clinton Spencer, Ipswich.

Students in the 2X-Y class were: Wesley Bacheller, Norton Bowden, Vincent O'Donnell, Edward Bessom, Lynn; Joseph Buckley, Lawrence; Albert Collins, Danvers; Mildred Hills, Byfield; Charles Pettingill, Bradford; Leo April, Essex; Stanley Bickford, Lynnfield Center; Lawrence Shanks, Beverly.

The following Freshmen were honor students: Gilbert Freeman, Beverly; John Fullington, Peabody; Theodore Smolak, North Andover; Merle Graffam, Lynn; Archie Nimmo, Methuen.

Notes From the Homemaking Department

More than one hundred parents and friends of the homemaking students visited the School on November 22. This is the largest "at home" attendance the School has ever had.

Christmas spirit prevailed at an assembly sponsored by the Student Home Economics Association on December 13. Following a business meeting of the association, Dorothy Lewis of Andover read Van Dyke's "First Christmas Tree." The remaining time was devoted to carol singing.

Students in Mrs. Roundy's Child Care classes have been making children's toys for welfare departments in the county. Candy and coats made in foods and clothing classes have also been distributed among welfare families.

An interesting assembly is anticipated in January when a representative from the educational department of Beaver Brothers will demonstrate the correct methods for laundering laces, silks, and fabrics of all kinds.

Winter Busy Season For Fruit Growers

According to W. H. Thies, Extension pomologist of the Massachusetts State College, there is no long vacation season for the apple grower.

One of the most important jobs during the present season is removing "surplus" trees. These trees include neglected apple trees in fields or fence rows, trees which never receive any spraying or pruning, and as a result are an excellent breeding place for insects and diseases of all kinds. They constitute a menace to commercial orchards in the vicinity. In some orchards, "filler" trees were planted and the trees have now grown so large that the main crop trees are being crowded and shaded. These filler trees should be removed as soon as they are large enough to begin crowding.

Pruning is another dormant season job for the fruit grower. Mr. Thies expresses the opinion that as much money is wasted by poor pruning as is gained by good pruning, but this only tends to emphasize the importance of pruning properly. Extension leaflet 109, "Pruning Young Fruit Trees," and Extension leaflet 10, "Pruning Bearing Apple Trees", both offer useful suggestions on pruning.

Another job for the dormant season, probably during February or March, is top-grafting trees of poor varieties to varieties which are more popular on the market. This is a much quicker way of changing varieties in the orchard than cutting down the old trees and planting new ones. Leaflet 117, "Top Grafting Apple Trees" gives instructions for doing this job.

Some of the most valuable winter orchard work is of the easy-chair type. This work includes starting an orchard account, to reckon costs of production, as well as profit and loss; planning the year's program of pest control, sales, and storage; reading up on recent experimental results; and attending meetings of fruit growers.

Meeting of Essex County Dairymen's Association Dec. 28

On Thursday, Dec. 28, the Essex County Dairymen's Association will hold its annual business meeting and election of officers in the agricultural building of this School, at 8 P. M.

Charles Shepard, Secretary of the Massachusetts Dairymen's Association, will discuss the recent hearings on the milk code and the special division which is being proposed for the State Dairymen's Association.

Local producer distributors and dairymen are invited to attend this meeting.

Mild Winters Introduce New Plant Diseases To New England

The mild weather of the past two winters which has let residents of New England enjoy the climate usually found in states as far south as Virginia and Tennessee has also brought the plant diseases of those states into this region. This is the observation of Dr. O. C. Boyd, plant disease specialist of the Massachusetts State College.

A wilt disease of sweet corn, known as Stewart's disease, has caused thousands of dollars damage in Massachusetts during the last two years. Until the season of 1932, it had occurred only occasionally in this section, although for years it has been common in Maryland, New Jersey, and Pennsylvania. The bacteria causing the disease live principally in the seed, but the sudden increase during the past two years seems to bear out experimental evidence that the disease can live in the field from one year to the next during mild winters.

Root-knot or root-gall, a trouble common on vegetable crops and potatoes in the southern states, caused considerable loss in the Connecticut Valley potato fields last year for the first time. The trouble is caused by a tiny pest known as a nematode, which evidently is able to live through mild winters.

A similar disease caused by nematodes, strawberry dwarf, has caused heavy losses among strawberry growers on Cape Cod during the 1932 and 1933 growing seasons. This, too, had been regarded as strictly a southern states disease until the last few years.

Dr. Boyd believes that the unusual damage caused by late blight of potatoes and tomatoes during the past two seasons may be attributed to some extent to the mild winters, even though these diseases are present to some extent almost every year.

Fruits of different kinds also have suffered from diseases that are not usually severe in this climate, and some of the common troubles, such as brown rot of peaches and fire blight of apples and pears, were much more severe than usual, as a result of the mild winters. If the present series of mild winters should continue, Dr. Boyd predicts that there will be more unusual plant diseases and perhaps those which are now common will be more severe.

Inexpensive meals should be built around whole grain cereals, vegetables, and milk in different forms, says Miss May E. Foley, extension nutritionist of the State College.

New Bulletins

Leaflet 73, "The Good School Lunch", is available free of charge at the Mailing Room, Massachusetts State College, Amherst.

"Cultivating the Farm Forest", which bears the number 147, is being distributed without charge by the Mailing Room of the Massachusetts State College, Amherst.

State College Leaflet 85, "Lawn Management Facts" has been revised and a new edition is available at the Mailing Room, Massachusetts State College, Amherst.

Dr. J. K. Shaw of the State College pomology department is the author of the two Extension leaflets No. 109, "Pruning Young Fruit Trees" and No. 10, "Pruning Bearing Apple Trees." These are available without charge.

Leaflet 117, "Top Grafting Apple Trees", obtainable through the State College, is one which is valuable to fruit growers, during the dormant season.

"Shipping Massachusetts Apples to out-of-state Markets", bulletin number 299, may be obtained through the Massachusetts Agricultural Experiment Station, Amherst.

"Chemical Composition of Herbage from Massachusetts Pastures", bulletin number 300, is obtainable through the Massachusetts State College, Amherst.

A new bulletin, number 38, entitled "Dairy Laws" is available at the Massachusetts Department of Agriculture, State House, Boston.

"The Agricultural Outlook 1934", miscellaneous publication number 182, is available at the United States Department of Agriculture, Washington, D. C.

"Milk for the Family" is a farmers bulletin number 1705, obtainable through the United States Department of Agriculture, Washington, D. C.

C. W. A. Headquarters At E. C. A. S.

Leaders of three of the C. W. A. (Civil Works Administration) projects in Essex County have their headquarters at this School. These include Miss Madeleine Torrey of Beverly, supervisor of the knitting project, Wilfrey Hay of Lawrence, supervising the sanitary milk production campaign, and Harry L. Cole of W. Boxford, supervisor of the Apple Pest Control.

The object of these projects lies in the distribution of funds appropriated by the legislature to men and women from welfare groups and the registered unemployed, in return for their assistance in bettering agricultural conditions in Essex County and in supplying the needy with hand knit sweaters.

The Good School Lunch

"The Good School Lunch" is the title of a leaflet just issued by the Extension Service of the Massachusetts State College, written by May E. Foley, extension nutritionist of the college staff.

Even in families which should have plenty of nourishing food, very often the children who carry their lunches to school may not be properly fed. They may eat a hurried and scanty breakfast, carry a light lunch to school, and then come home in the evening to a supper which is insufficient because the parents have had their heavy meal at noon. If the evening meal is light, says Miss Foley, then more attention should be given to providing a good lunch for the child to eat at noon.

A school lunch should contain milk or cocoa; sandwiches made from whole grain breads; fruits or vegetables, or both, either raw, canned, dried, or cooked; plain sweets, such as cake cookies, puddings, and occasionally some hard candy. Milk or cocoa should always be included as a drink, although occasionally in hot weather fruit juices may be substituted.

Among the things which should not go into the school lunch Miss Foley lists the following: sandwiches made with fat pork or fried meat with mustard, "hot dogs" with mustard, pancakes, doughnuts, layer cakes, bread soaked in molasses, tea, coffee, cheap poor candy.

In her new bulletin Miss Foley lists no less than twelve different school lunch menus. She suggests many different kinds of sandwich fillings which may be used along with salad dressings, and recipes for many different desserts which may be served with the lunch.

She particularly commends the practice of serving hot dishes, such as soups at the school, for children who bring their lunches. The bulletin contains several recipes for making hot dishes of different kinds which may be served at school.

Leaflet 73, "The Good School Lunch" is available free of charge at the Mailing Room, Massachusetts State College, Amherst.

What the Extension Service Does

It is interesting to note the value of the extension service through reports of the past year's work.

Up to the 31st of October, 1933, 47 alfalfa demonstrations containing 113 acres in Essex County were put in under the supervision of the County Agent, F. C. Smith. On a basis of 1½ tons per acre increase over other grasses and at \$12 per ton the increased value to the county per year is \$2,028. The acreage of alfalfa throughout the county, according to census figures has increased from 162 in 1925 to nearly 500 at the present time as a result of demonstrations

Can Be Fooled On Cans Warns M. S. C. Specialist

The average housewife, who guesses at the size of cans, may easily be fooled when she buys canned foods, says Miss May E. Foley, extension specialist in foods at the Massachusetts State College. Foods are packed in no less than 27 different sizes of cans, says Miss Foley, and some of them are so designed that it is difficult to judge the exact size, without reading the label. However, the net weight of the contents is indicated on the label, and so the buyer can make sure she gets her money's worth if she only takes the time to look at the label before she buys.

Vegetables are commonly packed in Number 2 cans, which hold about 20 ounces. But there is another can, Number 303, which is just an eighth of an inch shorter and a quarter of an inch narrower—so it may easily be mistaken for a Number 2—which holds only 16 ounces. These weights are indicated on the label. Sometimes when the housewife thinks she is getting a bargain at "three cans for a quarter" she is really buying the Number 303 cans, instead of the Number 2 cans, and is paying more for the vegetables than if she bought Number 2 cans at the regular price.

There is a Number 1 can and a Number 1 tall can, the same diameter, but different in height. The Number 1 can holds about 10 ounces, while the Number 1 tall can holds about 16 ounces, about the same as the 303 can.

As a general rule, canned food will cost less per pound if it is bought in large cans than if bought in small cans, such as the Number 1 or the Buffet size, which holds only 8 ounces.

The housewife will come nearer getting her money's worth if she reads the label and learns the weight of the food in the can, and then figures the cost on the basis of weight, rather than on the price per can.

sponsored by the county extension service. The estimated increased value of this hay reaches a total of \$8,000 per year to date.

To October 31st, 1933, 46 demonstrations in pasture improvement have been supervised in Essex County by the county Agent. This includes 559 acres, the increased value of which is estimated at \$8590 over non-improved pastures.

As a result of fruit meetings and spray demonstrations sponsored by the extension service, three men in Essex County made the 90% Clean Apple Club this year. These men had an average of 100 bushels more marketable apples per acre than those who did not receive the spray service.

During the year 340 fruit growers received the spray service. This involved 1700 acres of fruit. The estimated increased value was \$25 per acre or a total of \$42,500 for the county.

Union Agricultural Meeting

January 3, 4, and 5, 1934

Advance programs of the 16th annual Union Agricultural Meeting to be held in Worcester January 3, 4, and 5, 1934, include topics of unusual interest to present day farmers.

Wednesday, January 3, will be devoted to the following associations and topics: Massachusetts Farm Bureau Federation, New England Sheep and Wool Growers Association, Massachusetts Federation of Poultry Associations, The Truth About the New Deal and New England Poultrymen, Livestock Breeders' Meeting, Beekeepers Convention, Massachusetts Milk Inspectors Association, Federated Rabbit Clubs of Massachusetts, Massachusetts Fruit Growers Association, Poultrymen's Meeting, Banquet of Massachusetts Fruit Growers and Milk Inspectors Association.

On Thursday the following associations will meet: Massachusetts Fruit Growers, Massachusetts Milk Inspectors, Massachusetts Jersey Cattle Club, Massachusetts Roadside Markets and Farm Products Label Users, Massachusetts State Vegetable Growers, Massachusetts Arborists (closed meeting in the A. M. open meeting in the P. M.), Massachusetts Home Canners, Home Economics, Massachusetts Holstein Breeders, Cooperative Dairy Council of Massachusetts, New England Brown Swiss Breeders, Massachusetts dairymen. On Thursday evening the annual Union Agricultural Meeting banquet will have as its honor guest, Dr. Hugh P. Baker, President of Massachusetts State College.

Friday, the closing day, will find the following associations convening: Massachusetts Fruit Growers, Massachusetts Dairymen, Massachusetts Association of Country Homes for Vacationists, Federation of Massachusetts Milk Dealers, Fire Fighting Conference.

Final programs giving complete schedules of daily events will be furnished upon request to A. W. Lombard, Manager, 136 State St., Boston after December 25.

Notes From the Home Demonstration Agent

Mrs. Harriet J. Haynes, State Home Management Specialist, is to give two lectures on Tourists' Homes during the month of February. Will all those women interested in carrying this project notify Mrs. Mary M. McIntire at the Agricultural School, Hathorne.

Clothing projects under the supervision of Mrs. Esther Cooley Page, State Clothing Specialist, and Mrs. Mary M. McIntire, are now open for registration.

Mrs. McIntire is planning to meet with the town chairmen of the county during the month of January.

ESSEX FARMER AND HOME MAKER

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HATHORNE, MASS., JANUARY, 1934

NO. 1

Mortality In The Laying Flock

One of the most serious losses suffered by poultrymen is through the death of birds before the completion of their first year in the laying pen. Such losses mean not only less eggs and no return for meat, but also loss of efficiency in utilizing housing capacity. A ten or twenty per cent loss in birds means an increased overhead per hen for the balance of the flock, and the labor in caring for a pen of 100 birds is not appreciably greater than the labor on 70 or 80 birds in a pen of the same size. Normal and expected losses average 16 or 17% in New England, and it is generally recognized that these losses would be heavier if many birds were not culled and sold in time to prevent their dying. The losses indicated above would not involve epidemic of infectious laryngo-tracheitis, cholera or similar diseases.

A report from the Massachusetts State Experiment Station flocks in which no culling is practiced either when birds are placed in the house or thereafter, showed a mortality of 40% for the year beginning October 1, 1932. 24% of the deaths were from no recognized cause, but several of this group died on Saturday or Sunday during hot weather so were not in condition for laboratory diagnosis. 16% of the losses were from cannibalism, about 10% from ruptured oviducts or egg yolks, and approximately 7% from tumors, leukemia and paralysis.

It is conceded that many losses are due to the inability of birds to stand up under the strain of high production, stimulative feeding and too early maturity. Many pullets used as breeders may actually be dead before their offspring are born, and a very large proportion are gone before their daughters mature. If these birds have not the stamina to stand up under production, can they transmit stamina to their offspring? This is a question which is causing poultrymen to do some thinking, and it certainly seems reasonable to expect that a bird which has had the stamina to live and lay for one year should be more likely to transmit similar qualities to her offspring. Furthermore, the man who keeps over old birds for breeders has an opportunity to check on persistency in production—the most important single genetic character associated with high production.

Some interesting comparisons between hens and pullets as breeders
(Continued on column 2)

Study of Boston Market Being Made

For months there has been dissatisfaction in the method with which farm products have been sold and handled in the congested Boston market. After a lengthy study of present conditions as they exist in the Faneuil Hall District by the Boston Market Gardeners and the Division of Markets for Massachusetts, the Farm Bureau has offered its assistance in this study.

The Farm Bureau organization, in studying the present Boston market is considering questions related to transportation from sources of supply and consumption, distribution of foods other than vegetables and fruits; real estate values; market sites available; types of organization and management; types of products to be handled, and construction of the market itself. It is hoped that the study of this situation will have been well under way by early summer so that improved condition will be available this coming season.

C. M. Stearns,
Instructor in Market Gardening

TWENTIETH
ANNUAL
FARMERS AND
HOMEMAKERS DAY
WEDNESDAY
MARCH 21
1934

(Continued from column 1)

have been given out by the Ohio Agricultural Experiment Station. This study covered a twelve year period, and no birds were removed as culls. The average pullet mortality from 1921-1925 was 13.2%; 1925-1929, 38.4%; 1929-1933, 55.5%. During the first four years hens were used mostly as breeders; thereafter pullets predominated as breeders.

Two tests were conducted on hens vs. pullets as breeders. In test one, 1931-32, first-year mortality in laying pullets from hens was 35%; from pullets, 60%. Paralysis in pullets from hens was 12.5%; in pullets from pullets, 20%. In test two, 1932-33, gross mortality in pullets from hens was 40%; pullets from pullets, 60%. There was 16% paralysis in pullets from hens and 30% in pullets from pullets.

The statistics from Ohio are rather convincing evidence of the value of old breeders in reducing pullet mortality.

Marketing Committee Reports

The marketing committee of the Massachusetts Dairymen's Association made a very thorough study of the problems confronting Massachusetts dairy and submitted a report worthy of the study of every dairyman. This committee consisted of William N. Howard, N. Easton, Charles E. Shepard, Warren; Isaac Tripp, Jr., Westport; H. R. Bond, Needham; and C. B. Brown of Brimfield.

MAIN POINTS

First: There will be no extension of the greater Boston area under rules and conditions so obviously conducive to the elimination of Massachusetts Farmers now supplying those areas.

Second: There will be no imposition of penalty for surplus beyond that which is now borne by those who may be responsible for creating the surplus in the market which they supply.

Third: There will be elimination of all charges for transportation, weighing, and testing, or other features beyond the actual cost thereof.

Fourth: There will be a principle inserted in the milk code which will prevent all dealers from paying surplus prices to farmers for surplus milk and then selling that milk (for which surplus price has been paid) as whole milk in territories outside the Boston market milk area.

Fifth: Until such time as the codes become effective for secondary markets, no surplus milk will be sold in such secondary markets at less than the minimum prices applying to the greater Boston market.

Sixth: Ratings affecting near-by producers for the Boston market area will be adjusted more equitably, taking into consideration the cost of production in these areas.

Seventh: Surplus milk will be paid for more nearly on a basis of its value in the form in which it is marketed rather than on a basis of the value of it in butter, for the reason that surplus milk in this market commonly reaches the consumer in more valuable form than in butter.

"All of these contentions were known by those who went to Washington concerning the code. Judging from the fact that the code came from Washington without these modifications which we believe were necessary to protect justly the Massachusetts farmer, it is in our opinion, fair to presume that the New England representatives were either un-

(Continued on page 3, col. 2)

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President, George A. Meigs Hathorne
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Calendar

January 26—End of second term in agricultural and homemaking departments.

February 2—Norfolk basketball here.

February 9—Bristol basketball here.

February 14—Baby chick show, Andover.

February 27-28—Second Massachusetts Baby Chick and Egg Show, Worcester; Hotel Bancroft ballroom. Entries close February 19.

March 21—Farmers' and Homemakers' Day at this School.

Prize Winners At Worcester

At the mid-winter Union Agricultural Meetings this year an individual fruit-judging contest was inaugurated. Alfred Webb of Andover, and Gilbert Wallace, Bradford, both students at this School won first and third places respectively. Student Webb is the brother of Bradford Webb, a graduate of this School who won two \$60 scholarships to Stockbridge school of agriculture in Amherst. He is now pursuing agriculture in the west.

Student Wallace was awarded a \$10 prize by the Massachusetts Fruit Growers Association for his excellent judging at Worcester combined with superior results in his last summer's

Bees For The Fruit Orchard

Dr. Burton N. Gates

Coloney-bees are increasingly in demand, instead of package-bees, for the fruit orchard. There is increasing demand for rental. Experimentation is proving beyond doubt that normal colonies are more active in the field than the same weight of bees in packages from the south. Thus, from three to five pounds of bees in a normal colony, may be expected to set more fruit than the same weight of bees in a package. This should not be interpreted, however, that package-bees are without value.

The annual question arises with the fruit man, where am I to obtain colony bees; with the beekeeper, where am I to rent my bees? An effort is being made to bridge this gap. Saturday, January 13, 1934 at the Extension Service apartments in Worcester, beekeepers from the various parts of the State organized the Massachusetts Federation of Beekeepers. Temporary officers were selected, a constitution drafted and the first general meeting scheduled for Farmers' Week at the Massachusetts State College, next summer.

This state-wide organization is the outgrowth of discussions at the recent Union Agricultural Meeting. It is felt that there is need for such an organization for the purpose of bringing closer relations between beekeepers of various existing societies, between these several societies, between bee keepers in general and fruit growers.

At once, machinery was set to work to establish mutual benefits for fruit growers and beekeepers, to answer the annual questions "Where shall I obtain bees for the orchard?" and "Who wants to rent my bees?" The new organization will sponsor and promote fair practices. Furthermore, there are no fees for the services of the organization and users of the service need not be members of the society.

Colonies of bees available for rental in May are being tabulated and this information will shortly be available to the various offices of the Extension Service and to the secretaries of the fruit growers societies. Interested fruit growers are asked to get in touch with these agencies. Beekeepers having colonies to rent should immediately communicate with George A. Meigs, President, of Danvers, or Walter M. Copeland, Secretary, Old Concord Road, South Lincoln, Mass.

project. This prize is to aid him in developing a new project next summer.

Vegetable Judging

Forrest Haynes of Haverhill and also a student at this School, placed first in the vegetable judging contest and was awarded a \$25 scholarship for agricultural improvement.

Alumni Notes

Janus Ridley, a former student, of Lynnfield, is now attending Massachusetts State College.

Ruth Thomas of Salisbury, class of 1932, is employed as household assistant in Belmont.

Donald Williams of Middleton, class of 1932, is at a C. C. C. camp in Becket, Massachusetts.

Mr. and Mrs. Howard Barnes are rejoicing over the birth of their second daughter, born November 2, 1933. Mr. Barnes is a graduate of the class of 1923 and is living at 55 King St., Swampscott.

Howard Bredbury, class of 1929, is living in Lowell.

William Bushby, a former student, is now living at 56 River St., Danvers.

Eleanor Arrington, a student in the homemaking department, is the daughter of Leroy Arrington, a former student of the agricultural department from 1913 to 1916. Mr. Arrington is the first of the alumni to send a son or daughter to his alma mater.

Miss Eleanor Hill, daughter of Mr. and Mrs. Harry W. Hill, was married to Howard E. Bredbury, class of 1929, Saturday, December 23, 1933, at Lynn.

F. F. A. Notes

Word received from Professor V. A. Rice sets March 23 and 24, 1934, as the next judging contest dates at Massachusetts State College. This fixes the final date for public speaking the evening of March 23.

The Essex Chapter of Future Farmers of America turned its January meeting over to the Service Committee, which, in turn, secured for the guest speaker of the afternoon, Gilbert E. Lame of West Peabody, known to some as the "jack-knife" minister". Whittling and carving have been hobbies of Mr. Lame's for many years, yet he is known not only for this, but rather for greeting with a wave of his hand, the thousands of tourists who frequent the Newburyport turnpike at West Peabody daily. Some say that only the Atlantic ocean exceeds in number the waves of Mr. Lame.

Basketball Schedules

BOYS

Feb. 2—Norfolk

Feb. 7—Keith Academy

Feb. 9—Bristol

Feb. 16—At Melrose

Feb. 22—At Stockbridge

Mar. 2—At Norfolk

Capt. Joseph Desmond

Mgr. Francis Sparks

Coach P. H. Couchig

GIRLS

Feb. 6—At Hamilton

Feb. 13—At Hamilton

Capt. Sara Munroe

Mgr. Mollie Phippen

Coach M. Featherstone

Code of Fair Competition For Commercial and Breeder Hatchery Industry

On December 27th, 1933, President Roosevelt approved a code for the hatchery industry. Thanks to some excellent work on the part of members of the Northeastern Poultry Producers Council who participated in setting up the code, New England chix will not be subject to unfair competition with western chix, because the code requires that when the term "accredited" or "certified" is used in advertising and on the label of chick boxes, that the name of the state and the supervising agency must be given. In the case of labelling shipments of chicks, hatching eggs or breeding stock, not only must the state and supervising agency be given, but also a brief description of the method of accrediting, certification, supervising, blood-testing, etc. "Accredited"

has in the past meant one thing in Massachusetts and something entirely inferior in some other states. Where it has indicated freedom from pullorum disease in Massachusetts it has meant only occasional culling or perhaps changing the litter in the houses of adult stock at certain intervals. The person familiar with local standards has therefore often had a false impression when reading the advertising of some other sections. The code also requires that hatching eggs shall average not less than 23 ounces per dozen. While this is below the Massachusetts standard, which is one ounce per dozen higher, it is an improvement for the middle west.

Our feature that may be disappointing to buyers of chix is the fact that members of the Hatchery Industry are forbidden to give extra chicks beyond the number specified. It has been customary for Massachusetts breeders to give three or four extra chix on each order of one hundred, but this is considered unfair competition under the code.

Purchasers of chix should bear in mind however, that users of the label on their chick boxes as against non-users have spent money and made an effort to give the purchaser of chix insurance according to the regulations of their respective states. As far as Massachusetts is concerned, no state has superior stock, supervision, or stiffer requirements, and although distant pastures often look greener, it hardly seems necessary to remind Essex County readers that nearby purchases are most likely to give satisfaction.

Garden Brevities

1. Make your plans for 1934 gardens during the winter months.
2. Did you try the Waltham Beauty sweet pepper last year? It is an ex-

New Bulletins

In the new Extension Leaflet No. 149 entitled "Annuals as Garden Flowers", written by Clark L. Thayer and Arnold M. Davis of the Massachusetts State College, the following topics are dealt with: (a) Definition of annuals; (b) hardness of annuals; (c) seed sowing; (d) uses of annuals; (e) disease and pest control; (f) annuals for particular uses and locations. This bulletin is issued by the Extension Service of the Massachusetts State College free of charge.

Another valuable bulletin is one dealing with mushrooms, No. 151, "Mushroom Culture" by Grant B. Snyder of the State College. It includes information on: (a) analysis of the mushroom; (b) where mushrooms grow; (c) temperature; (d) moisture; (e) manure; (f) composting the manure; (g) mushroom beds; (h) spawn; (i) spawning and casing the beds; (j) growing period and picking; (k) marketing; (l) insects and diseases; (m) bubbles. This bulletin may also be had for the asking.

\$112,000 Profit By Welfare Gardens

More than \$213,500 is the estimated value placed on the community garden and canning work carried during 1933 by 23 communities of the state under the direction of the Massachusetts State College extension service. This value, says William R. Cole, extension man in horticultural manufactures, who was in charge of the work, is based on reports received from 15 of the 23 communities. These 15 communities invested \$25,000 for plowing, seeds, fertilizer, equipment, and supervision, and the total value returned was \$137,275 or a profit of more than \$112,000. These communities, in addition to the fresh vegetables which the gardeners obtained, stored 530,000 pounds of root crops and cabbage and canned 138,500 No. 3 cans.

(Continued from page 1, col. 3)

able or unwilling to amend the code along the lines suggested."

"In either case the question naturally arises as to what degree we may now be justified in pinning our faith to amend the code in respect to the points herein enumerated. These are the facts as we understand them. Out of this experience comes a still firmer conviction, that a forceful organization composed exclusively of Massachusetts dairymen is an absolute essential to the dairy industry of Massachusetts."

F. C. Smith, County agent.

cellent yielder and of high quality.
3. Does your land need lime? Most crops do better on a sweet soil. Potatoes and strawberries are exceptions.
4. Look over your tools and get them ready for action.

Series of Radio Talks

The gardening season will be inaugurated on the radio programs of the Massachusetts State College over WBZ-WBZA during February, with talks on vegetable gardening by O. C. Boyd and W. R. Cole, both of the State College staff. Dr. Boyd opens the series on February 5, and Professor Cole continues on succeeding Mondays.

The complete schedule of radio programs by State College speakers over WBZ-WBZA during February follows:

- Home Forum (Mondays at 1:50)
 - February 5—Mrs. Ruth D. Morley, What is Adolescence?
 - February 12—W. R. Cole, Vim, Vigor, and Vegetables.
 - February 19—W. R. Cole, The Garden, Where and How Big.
 - February 26—W. R. Cole, Looking Over the Seed Catalogs.
 - Farm Forum (Mondays at 12:20)
 - February 5—O. C. Boyd, Healthy Plants for Better Vegetables.
 - February 12—Roy E. Moser, Shall I Move to the Farm?
 - February 19—C. J. Fawcett, The Dairyman's Crutches.
 - February 26—J. C. Graham, When You Buy Baby Chicks.
 - 4-H Club (Saturdays at 12:20)
 - February 3—Emily Smith, Middlesex-county club agent, Clothes and the Girl. Musical number to be announced.
 - February 10—George Erickson, Middlesex county club agent, It's Baby Chick Season. Vocal solo by Barbara Boyd, Waltham.
 - February 17—Frances Andrews, Franklin county club agent. You and Your Food. Violin solo by Gabrielle LaPorte, Orange.
- In addition to these programs over WBZ-WBZA, H. J. Talmage of the Berkshire county extension service and O. C. Boyd of the State College will speak over WGY on February 13 and 15 respectively.

Health Messages Via Radio

The radio program sponsored by the public education committee of the Massachusetts Medical Society and Massachusetts Department of Health will include the following topics over WBZ at 4.40 P. M. in February:

- Feb. 2. What a Parent Should Know About Measles.
- Feb. 9. Milk.
- Feb. 16. Stomach Trouble.
- Feb. 23. Lumps in the Neck.

At 5 P. M. on Fridays in February, queries from the public will be answered under the sponsorship of the Department of Public Health through the courtesy of WEEL. Questions to be answered may be sent to Radio Health Forum, State Department of Public Health, State House, Boston.

- 5. Early Yellow Sensation proved to be earlier than Golden Bantam or sunshine corn last year.

Private Life of Vitamins Exposed By Scientists

The low down on the members of the vitamin family has been assembled by Miss May E. Foley, nutrition specialist of the Massachusetts State College, who reports on the findings of the fact finders of the scientific world. Men and women are spending years of intensive study exposing the private lives of the vitamins, and Miss Foley summarizes some of the facts which have been assembled to date.

Vitamin A is necessary for growth and reproduction; it maintains resistance to infections of different kinds, and promotes good health. Vitamin A is found in cod liver oil, butter, cream, milk, egg yolks, liver, kidney, salmon, and all green and yellow vegetables.

Vitamin B stimulates the appetite, helps lactation, prevents nerves becoming frayed, wards off diseases of the digestive tract, and helps ward off fatigue. This vitamin is destroyed by high temperature, and is found in whole grains, beans, peas, liver, wheat germ, and yeast.

Vitamin C. first became famous because it was found to prevent scurvy. Since then it has been found necessary in building strong teeth and bones, promoting growth, good disposition, and general good health. This vitamin is easily destroyed by cooking, especially if it is exposed to air, or if alkalies, such as soda, are present. It is found in citrus fruits, tomatoes, and in some varieties of apples, particularly Baldwin.

Probably the most famous member of the vitamin family is brother D, known to his friends as the Sunshine Vitamin. It is found in direct sunlight, and the best known substitutes are cod liver oil, salmon, egg yolk, and specially treated milk. Vitamin D is important in building strong bones and teeth, and preventing rickets.

Vitamin E. not so well known as some of the others, is necessary to reproduction. It is found in whole grain cereals, milk, meat, and green vegetables.

The last of the vitamin family about which much is known is Vitamin G. The baby brother of the family, he helps the others in promoting normal growth and functions of the body. He helps to prevent pellagra and other skin troubles with which we humans are afflicted. Vitamin G. is found in milk, leafy vegetables, meat, and eggs, and is not easily destroyed by cooking.

When apples shrivel in storage, the air is too dry. Anything which will put more moisture into the air, will help prevent shrivelling. One Massachusetts fruit grower last year shoveled several tons of snow into his apple storage to help keep the storage cool and keep the air moist.

Spring Projects

Spring projects were discussed on January 9 by the Extension Service Advisory Council at this School. Anyone interested in carrying home management, nutrition, or cotton dress projects are asked to get in touch with her town chairman or to write directly to Mrs. Mary McIntire, Home Demonstration Agent, Hathorne. Mrs. Harriet J. Haynes of the State College will conduct the home management classes; Mrs. Esther Cooley Page, cotton dresses; and Mrs. McIntire, nutrition.

The town chairmen include: Mrs. Carl A. Dodge, W. Newbury; Mrs. George Dow, Topsfield; Miss Eleanor Phelps, Swampscott; Mrs. Howard Fairchild, Mrs. Andrew Townsend, Saugus; Mrs. Randolph Ackerman, Mrs. Archie Pow, Salisbury; Mrs. W. E. Curtis, Ballardvale; Miss Mary McGuigan, Danvers; Mrs. James Benham, W. Gloucester; Mrs. Leander Maloney, Groveland; Mrs. Leonard Kimball, Haverhill; Mrs. E. J. Ready, Hamilton; Mrs. John Goodhue, Ipswich; Mrs. Richard Costello, Lawrence; Miss Hazel Metcalf, Lynn; Mrs. A. G. Oleson, Manchester; Mrs. H. W. Hathaway, Methuen; Mrs. William Bewsher, Middleton.

Message For County Extension Service Papers

George L. Farley,
State Club Leader

It is difficult to put into words my appreciation of the many kindnesses which have been extended during the weeks that have gone by. Some of these messages were so personal that they just could not be mentioned, but the many notes and cards which I have received moved me most deeply. I shall never be able to in any way repay you for these many expressions of kindly friendship. I can only hope that in the months and years to come it may be my privilege to serve in some small way, thus returning, in this inadequate way, the joy which came to me from the realization of the many friends that I have scattered throughout the state.

I think that you will agree with me that the club house having reached the point of construction where it can be used will mark a new era in 4-H Club work in Massachusetts. Our hope now is that things will continue until the building is completely finished, and furnished with the necessary equipment to make it one hundred per cent usable. Our hope is that uses may be found for it, including week end visits to the campus of club groups, using the building for headquarters.

Even though a bit late I extend to you my best wishes for a happy and successful 1934.

Are You Overweight?

For the overweight person there are four "Do's" and four "Don'ts".

1. Do remember that you must have a strong will to reduce.

2. Do consult a physician if you think you may have some organic trouble.

3. Do get enough protein, minerals and vitamins. You can get these from skim milk, lean meat, eggs, whole cereals, vegetables and fruits.

4. Do drink plenty of water, the bulk of it before breakfast and between meals.

1. Don't attempt to reduce too rapidly—1½ to 2 pounds weekly is enough for the average person.

2. Don't expect to take off in one or two months what has been accumulating for ten or twenty years.

3. Don't be discouraged if you fail to lose much the first few weeks. Keep at it and you will be rewarded.

4. Don't take drugs such as are found in anti-fat gums and other patent medicines.

The overweight person should avoid excess starches, sugars, syrups, candies, rich desserts, rich sauces, fats and oils. He should eat plenty of vegetables. Fresh fruits with little or no sugar may be used in abundance, and skimmed milk and lean meat are valuable.

May E. Foley,
Extension Nutritionist.

Essex County 4-H Members Win Canning Honors

Of the eight young people, Massachusetts members of the 4-H canning clubs, who were among the winners in the eastern section of the National Contest held in conjunction with the 4-H Club Congress at Chicago, four were Essex County girls.

Doris Albrecht, Genevieve Bingham, and Helen Walker, all of North Andover took first, second, and third prizes respectively; and Esther Usher of Danvers took fourth place in the pickle class.

Fun At Home

A good game to try at a party around St. Valentine's Day is tearing paper pictures. Have everyone in the group supplied with a piece of paper about a foot square. Each person is to stand with his hands behind his back and try to tear the paper into the shape of a heart. Probably the first attempt won't be very successful so a second effort should be permitted before any prizes are awarded.

A similar stunt is to provide each player with a pencil and sheet of paper. Turn out the lights and then have each player draw a horse, or cat or dog, in the dark. This may be varied with the skill of the group, but even with practice, drawing in the dark is not an easy task.

Mary Pozzi, M. S. C.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 15

HATHORNE, MASS., FEBRUARY, 1934

NO. 2

Notorious Pest Invades Orchards

The San Jose scale is attaining notoriety in local orchards. Lest it be allowed to demonstrate its capabilities of spreading great injury to Essex County orchards, fruit growers are urged to utilize oil sprays which have been recommended both for this pest and for red mite as well.

W. D. Whitecomb, Entomologist at the Massachusetts Experiment Station, explains home-made oil emulsion as follows: Use a lubricating oil of a viscosity of 100-120 seconds Saybolt, with an unsulphonated residue of Paraffine Oil".

Oil used for spraying fruit trees is exempt from Federal tax if a form statement to this effect is signed by the customer.

Formula

Water, 20 gallons; calcium caseinate, 5 pounds; oil, 40 gallons; makes 60 gallons oil emulsion at an estimated cost of 15 cents per gallon; contains 67% actual oil and requires 4½ gallons per 100 gallons of spray.

Directions

Put water in spray tank. Run pump and agitator and add slowly the calcium caseinate. When this is dissolved, add the oil about as fast as it will run from a drum, or slowly and carefully. Let agitator mix this thoroughly, then pump through spray hose and gun at 250 pounds pressure into storage barrels.

A second pumping is advisable unless the emulsion is used the same day as made. A twice pumped emulsion will keep about a week in barrels or longer in tightly closed drums. Do not store emulsion in containers having any lime sulphur residue.

The emulsion should not be made during freezing weather, but when made it will stand the normal temperatures expected during the delayed dormant period.

The San Jose scale attacks not only the trunks and branches of trees but the leaves and fruits as well. Its minute size makes it a most difficult insect pest to successfully control. Hence great care should be exercised in spraying thoroughly so that each tiny scale will be hit. Infested trees should be sprayed in early spring before growth begins.

20th Annual Farmers' and Homemakers' Day

For nineteen years the second Wednesday in March has been a significant one to friends of the Essex County Agricultural School. This day is set aside to express a cooperative feeling with farmers and homemakers which is constantly present in the minds of all connected with the School. This year the date for Farmers' and Homemakers' Day falls on the third Wednesday of the month, March 21.



Hugh L. Baker

The program is high in agricultural value and will be equally interesting to homemakers and their friends.

All who learn of the fact that President Baker of the Massachusetts State College is to be the main speaker are very much pleased. Mr. Forbush of the Federal Land Bank is also going to speak concerning the new production credit loans.

In the afternoon the customary sectional meetings will be held, as follows: Homemaking, Poultry Husbandry, Dairying, Floriculture and Gardening, Fruit Growing, and Market Gardening. The management is arranging full two-hour schedules for each section and some very strong speakers are being engaged.

Professor Lee, favorably known by many eastern poultrymen, will be the main speaker in the poultry section. Mr. Chester Blodget of Sterling is going to give a talk on roadside stands and roadside marketing before the market garden section. Mr. C. F. Adams of the First National Stores

Seed Treatment of Vegetables to Improve Stands

From a number of carefully recorded tests, it has been found that formaldehyde dust mixed with the soil in flats, greenhouse benches, and hotbeds, has increased the number of strong, vigorous seedling plants from 60 to over 100 per cent, depending upon varieties. The material can be prepared by the grower for a small sum per pound. One pound will treat about two bushels of soil for flats. One and one half pounds per sash will do the trick for hotbeds. It does prevent damping off.

A poor come-up of beets, spinach, or cucumbers in the home garden or in the commercial field, is more likely to be due to the death or damping-off of seedlings before they come through the soil than to "poor seed" or hot winds. This is particularly true in the home garden or in the commercial farm during wet seasons.

Damping-off is caused by

a few specific fungous parasites that readily live from year to year in the soil, especially soils rich in organic matter. These fungi attack and kill the tender seedlings either before they come up or after they are through the soil, causing them to "drop over" and dry up.

In seed flats, transplant flats, and hot-beds, damping-off is best controlled by adding formaldehyde dust to the soil just before seeding. In the case of out-door seeded crops, however, it is not practicable to mix formaldehyde dust with the soil in the garden or field. But it has been found that dusting the seed of such crops as beets, carrots, parsnips, cucumbers and melons with powders like Red Oxide of Copper and Organic Mercury compounds will protect the young plants against damping-off and thus improve the stand. Spinach responds best to the Red Oxide of Copper and should be treated with that powder instead of the organic mercury dust.

Caution

Seeds that are treated with mercury compounds would be poisonous if eaten by humans or live stock.

system is to discuss the dairy situation with the milk producers. This in itself is a very important feature. Miss Edith Jamieson of the Lever Brothers Company will discuss the care of clothing with the homemakers.

A more complete program will attention to the educational and trade exhibits will be available soon.

**FARMERS' AND
HOMEMAKERS'
DAY
MARCH 21**

Essex Farmer and Homemaker

HATHORNE, MASS.

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Secretary, Frank H. Coville North Andover

Calendar

February 27-28—Public Speaking Elimination Contest at this School.
March 7—Regional Public Speaking Contest at Norfolk County Agricultural School, Walpole.
March 9—Senior Dance at this School.
March 21—Farmers' and Homemakers' Day at this School.
March 23-24—Public Speaking and Judging Contest at Massachusetts State College, Amherst; also the F. P. A. State Meeting at Amherst.

Catskill — Satisfying Strawberry

The strawberry formerly known as No. 4435 has been christened "Catskill". Since being introduced into Massachusetts it has developed prolifically.

The plants are large, very vigorous and yield heavy crops. The berries are unusually large, roundish wedge, slightly irregular, moderately firm, dark red but glossy and attractive, mild subacid and good in quality. They ripen in midseason or about four days later than Howard.

Essex County growers would do well to cultivate this variety derived from the cross of Howard by Marshall.

New England Chicks Best Available

"Buy at home" is a good motto for the New England poultryman to follow in buying his baby chicks this winter and spring, says Professor J. C. Graham, head of the department of poultry husbandry of the Massachusetts State College. Buying from a local hatcheryman, points out Professor Graham, makes it easier to check on the reputation of the breeder or hatcheryman and the quality of his chicks, and in case of misunderstandings, adjustments can be more easily made.

Added to that reason is the fact that in freedom from disease New England flocks as a whole are ahead of the entire country.

"Regardless of location," says Professor Graham, "hatching eggs or baby chicks to be used as breeding stock should be purchased only from the very best breeders. It so happens that in the case of many breeds of birds, the finest and most carefully bred flocks are located in New England."

The State Department of Agriculture has recently issued three lists of baby chick producers from whom other poultrymen may buy reliable chicks. The Accredited List includes poultrymen whose flocks are free from pullorum disease. The Certified-Accredited List includes poultrymen whose flocks have certain definite qualities in addition to being free from pullorum disease. The third list is based on Record of Performance, or trap-nest records of birds in the flock, in addition to the definite qualities of the Certified Accredited flocks, and freedom from pullorum disease.

Profitable Particles

Mimeographed forms of the sources of nectar and pollen in eastern Massachusetts, arranged according to their blooming dates, may be secured through G. A. Meigs of this School, for the asking.

Any future snow storms like those recently experienced, will give farmers an opportunity to haul their logs to the saw mill.

"Do not read good books. Life is too short for that. Read only the best. And of these only read what gives you the greatest pleasure. Great books, great men, great problems and great doctrines, great facts and their lessons cannot but result in high thought. The busier we are, the more severe our selection should be. Many men absorbed in business, show such a rare quality of culture that we are surprised at it. The reason invariably is partly because hard work and even the weariness it leaves carry a nobility with them, but also because there is no room in such lives for inferior mental occupation." Ernest Dimnet in "The Art of Thinking."

Future Farmers Elect New Officers

The annual election of officers for the Essex Chapter of Future Farmers of America Association was held recently at the School.

The newly elected officers who will take office on Thursday, March 1 are the following:

President, E. Hartwell Daley, Salem; Vice-President, Kenneth White, Salem; Secretary, Ruth Fairweather, North Andover; Treasurer, Edward Bessom, Lynn; Assistant Treasurers, Leo Leonard, Lynn, and Charles Clinch, Lynn; Reporter, Gilbert Freeman, Beverly; Executive Committee, Joseph Andreas, Beverly; Julia Foster, Beverly; and William Hayes, Swampscott.

The outgoing officers are: President, Sydney Porter, Beverly; Vice-President, Ernest Thayer, Lynn; Secretary, E. Hartwell Daley, Salem; Treasurer, Kenneth Nunan, Saugus; Reporter, Clinton Spencer, Ipswich; Executive Committee, Henry Richardson, Lawrence; and Clarence Patterson, Peabody.

Farmers Form Credit Associations

Four groups of Massachusetts farmers have organized to take advantage of a new scheme of financing which the federal government has made available. These organizations are known as Production Credit Associations. Headquarters for Essex and Middlesex counties are at Lowell. Any Essex or Middlesex County farmer who wants to borrow money through this new financial agency can do so if he is entitled to credit.

The Production Credit Associations are permanent corporations, capitalized, in the case of those in Massachusetts, for \$100,000 to \$150,000. The members are farmers desirous of borrowing money. The original capital stock of the association is purchased by the Production Credit Corporation, which is one of the four principal divisions of the Farm credit Administration of "F. C. A." of Springfield.

The farmer who wants to borrow money from the association must offer security and give some indication of his ability to repay the loan. If the loan is granted, he must buy stock in the corporation to the extent of 5 per cent of his loan. All loans are for the duration of not more than a year.

The Lowell Association has as its Secretary, Mr. George C. Upton. Mr. Upton, with Edwin H. Forbush of the Production Credit Corporation of Springfield, will be present at this School on Farmers' and Homemakers' Day, March 21, to explain the functioning of these credit associations.

Hog Reduction Code

The Government processing tax on the slaughtering of hogs is \$1.50 per 100 pounds, which means that the average farmer must pay \$3.00 per hog marketed. The only way hog producers of Essex County can get this back or benefit by this program is to sign up the hog reduction contract agreeing to reduce the number of hogs marketed in 1934 by 25% as compared with the average of 1932-33.

To qualify for this program a hog raiser must secure a written statement or sales slip from the person to whom he sold his hogs during the years 1932-33. If he can satisfy the county committee that he owned and marketed so many hogs during those years and he signs an agreement to reduce 25% under those figures, then the government will pay him \$5.00 per head on the 75% remaining and marketed during 1934.

Anyone interested in gaining further information on the hog reduction code is asked to get in touch with the county agent F. C. Smith, Hathorne, or with any member of the county committee.

The committee consists of, Joseph Smith, Lynnfield, chairman; Anthony Bettencroft, Beverly; and Winthrop White, Andover.

F. C. Smith

Dairy Farmers Need Temperatures Below

50

A drop of 50 degrees in two hours time is recommended for dairy farmers by W. C. Harrington, Extension Engineer of the Massachusetts State College, but he refers to milk and not to the temperature of the atmosphere. It is not enough, he declares, for milk to leave the farm sweet, but it must leave in such a condition that it will keep sweet for at least three days. In the milk pail, the temperature is around 95 degrees; and for satisfactory results it is necessary that milk be cooled to 50 degrees or lower within two hours after milking and that it be held at or below this temperature until delivered or consumed.

For such purposes Mr. Harrington recommends a milk house or milk room arranged not only with mechanical cooling equipment but arranged for the convenience of the dairyman. These milk rooms or houses can be made only by careful planning. Suggestions for wiring, heating, lighting, mechanical cooling, and construction of such rooms and houses have been prepared for distribution by Mr. Harrington. Copies may be secured from any county agricultural agent or from Mr. Harrington at the Massachusetts State College, Amherst.

Poultrymen—Save This List of Dates

Here is the list of 1934 holidays of greatest interest to poultrymen together with the things most in demand.

Holiday	Date	What Buyers Want
Purim	March 1	Broilers, fat fowl, turkeys, pigeons, squabs.
Passover	March 31 (sunset)	Broilers, turkeys, ducks, geese, fat fowl, capons
Easter	April 1	Broilers, fowls, ducks, geese, capons, squabs, rabbits, pigeons.
Last Passover	April 6-7 (sunset)	Live poultry of all kinds, squabs, pigeons.
Feast of Weeks	May 20-21	Prime quality live poultry of all kinds including squabs and pigeons.
Decoration Day	May 30	Broilers and prime stock of all kinds including squabs and pigeons.
Independence Day	July 4	Broilers, fowl, squab, pigeons.
Jewish New Year	Sept. 10-11 (sunset)	Broilers, fat fowl, turkeys, ducks, geese, squabs, pigeons.
Day of Atonement	Sept. 19	All prime quality, especially chickens and fowl, also squabs and pigeons.
Feast of Tabernacles	Sept. 25-26	Ducks, fat geese, fowl, broilers, squabs.
Feast of Law	October 1-2	Prime quality live poultry of all kinds.
Thanksgiving	Nov. 29	Broilers, turkeys, fowl, chicken, ducks, geese, capons, rabbit, squabs, pigeons.
Christmas	Dec. 25	Broilers, turkeys, fowl, geese, ducks, capons.
New Year	Jan. 1, 1935	

No Peaches In Massachusetts During 1934

Massachusetts orchards won't produce very many—if any—peaches in 1934. The periods of extremely cold weather, during late December, and again during February, have killed practically all the fruit buds.

The fruit buds of peaches are usually killed when the temperature goes to 15 degrees below zero. With temperatures much colder than that the woody parts of the tree are frequently killed.

The extent of injury to peach wood cannot be determined until warm weather, and for that reason no pruning at all is recommended until March, and then only light pruning.

Apple trees, particularly of the Baldwin variety, according to J. S. Bailey of the Massachusetts State College, have been injured by freezing, causing the trunks to split. Sour cherries, plums, and pears apparently have not been injured, but sweet cherry trees have suffered severe injury.

Erratum

Mrs. Douglas Rogers, formerly Miss Emily G. Jordan, has written to correct our mistake in printing her name Dorothy Jordan, in the January issue of this paper. Mr. Rogers is a graduate of this School, and with his bride, is residing at 50 Silver St., Dover, N. H.

Radio

Farm Forum

WBZ 12.20 P. M.

Mar. 5, W. H. Thies—New Wrinkles in Spraying Equipment.

Mar. 12, S. R. Parker—Five Years of Extension Work in Massachusetts.

Mar. 17, F. H. Branch—Farming for Low Prices.

Home Forum

WBZ 1.50 P. M.

Mar. 5 Mrs. R. D. Morley—Adolescent Friendships.

Mar. 12, Mrs. H. J. Haynes—The Spic and Span Kitchen

Mar. 19, Mrs. H. J. Haynes—Household Pests.

Massachusetts

WGY Talks

12.30 P. M.

Mar. 8, E. M. Mills—Routing the Rodents.

Mar. 15, W. H. Thies—The Fruit Growers Spring Offensive.

Mar. 29, R. W. Donaldson—Pepping up the Pastures.

Health Messages

WBZ 4.30 P. M.

Mar. 2—Age and Cancer.

Mar. 9—Some Problems of Epilepsy.

Mar. 16—Fractures.

Mar. 23—How to Keep the Well Child Well.

Health Question Box

WBZ 4.40 P. M.

Fridays

Radio Health Forum

WEEI 5.00 P. M.

Cotton Dress Project

Leader groups in the Cotton Dress Project, under the direction of Mrs. Esther Cooley Page, State Clothing Specialist, are being organized in the northern and eastern parts of Essex County.

Leaders from the northern part of the county will meet in the Grange Hall, Amesbury.

Leaders from the Eastern part of the county will assemble at the Essex County Agricultural School, Hathorne.

Children's Clothing groups, under the supervision of Mrs. Mary M. McIntire, Home Demonstration Agent, are being carried in Amesbury and Salisbury, and Furniture Renovation in West Gloucester.

Miss Marion P. Crawford, former Home Demonstration Agent of Essex County, is enjoying the southern climate of St. Petersburg, Florida.

On Making Cake

Question: What makes a cake fall?
Answer: Too much shortening, too much sugar, not enough leavener, or insufficient making may be responsible.

Question: When a cake humps in the middle or cracks on top, what is wrong?

Answer: The oven may be too hot at first, or the batter may have too little liquid, or too much flour.

Question: What makes a cake heavy?

Answer: The batter may have too much shortening or sugar, too much liquid, too little leavening, or too slow an oven.

Question: When a cake is too dry, what is the difficulty?

Answer: A dry cake may be caused by too little shortening, too little liquid, over-beaten egg whites, addition of chocolate without addition of more liquid or addition of cocoa without addition of more fat.

Question: When a cake falls apart as it comes from the pan, what is wrong?

Answer: Too much shortening or too much leavening, removal of cake from pan too soon, or removal of cake carelessly may be the difficulty.

Question: Can sour milk be substituted for sweet in making a cake?

Answer: Yes, simply add one-half teaspoon of soda to the flour, for each cup of milk. This counteracts the acidity of the liquid and leavens one cup of flour. Baking powder should be used to leaven the remainder of the flour. Sweet milk can be substituted for flour by omitting the soda, and using as much making powder per cup of flour as directions call for.

Question: Can one baking powder be substituted for another in equal amounts?

Home Nursing

A course in Home Nursing, under the direction of Mrs. Mary Roundy, Home Nursing Instructor in Essex County, is being carried on at the Y. W. C. A. building in Newburyport. Miss Elizabeth H. Hurd of High St., Newburyport, organized the group.

Spring groups are being organized for Essex, Haverhill and Peabody.

Fun At Home

Have You Seen My Sheep? This is a running game played in a single circle. The player who is "it" is called the shepherd. He taps on someone's back and says "Good morning." The tapped player who is a housekeeper says, "Good morning." The shepherd says, "Have you seen my sheep?" The housekeeper says "How is it dressed?" The shepherd then describes a player, preferably one who is standing not far from the housekeeper. As soon as the sheep recognizes itself or the housekeeper knows who is being described, they begin to run. The housekeeper tries to catch the sheep before it gets back to its home. If this happens, the sheep must go into the center which is called "in the soup." Whether or not the sheep is caught the housekeeper becomes the shepherd for the next. The shepherd does not chase. When he has described his sheep he steps into the housekeeper's place.

Answer: No, look on the can and see how much is advised. Baking powders vary in their ability to leaven.

Question: Why should flour be sifted once before measuring?

Answer: Because sifting makes the flour lighter. If flour is measured before sifting, it is very easy to get too much into the cake.

Question: Should a hard fat be melted when using in a cake?

Answer: No it should be only slightly warmed, so it will cream easily. A melted fat makes a coarse-textured cake.

Question: What are the directions for substituting cocoa for chocolate in a cake?

Answer: Allow 4 level tablespoons or 1-4 cup of cocoa and 1-2 tablespoon of additional fat for each square of chocolate. For chocolate flavor in cakes, with no shortening, such as sponge and angel food, cocoa is preferred. Sift cocoa with flour in such mixtures.

Question: Does the position in the oven make any difference as to the proper baking of the cake?

Answer: The pans should be placed as near the center as possible. Do not place one pan directly over another, and do not crowd the oven too full, as there must be circulation of air for good results.

Home Grounds Improvement

Arnold M. Davis, whose garden talks have been warmly acclaimed in Essex County, will again come to the county in April to give nine lectures on Home Grounds Improvement.

Six of these discourses will deal with garden maintenance and are scheduled for April 2, 3, 4, and May 16, 17, 18. June meetings will be announced in the March issue of this paper, as will the meeting places.

LIVER

Any kind of liver is good food, providing it is well cooked. The difference in quality between calves' liver and other livers such as pig, lamb and beef, hardly justifies the difference in price. All are rich in iron and copper.

Low heat and short cooking preserve the texture and flavor of liver. Scalding before cooking will improve the older and tougher kinds.

Some unusual and good ways to prepare liver are given below:

Soup with Riced Liver (Hungarian)
1-4 lb. beef liver: 1 teaspoon butter
1 egg: 1-2 teaspoon salt

Bread or cracker crumbs

Make a good beef soup; when nearly done, scrape liver very fine and mix it with beaten egg, butter, salt, and enough crumbs to mold. Strain soup and put the liver mixture through a fine colander into the soup. Boil 3 minutes and serve hot.

Liver Sunrise

(for young children)

Grind boiled or broiled liver with one-half as much crisp bacon. Moisten with tomato juice and add a little salt. One or two tablespoons may be given to the child at one year or eighteen months.

This makes an excellent sandwich.

CWA — CWS

CWA and CWS projects under the general supervision of the State Department of Agriculture have not only aided 6000 men and women in Massachusetts to be relieved of their welfare and unemployment burden, but have been valuable from the standpoint of building up agriculture.

The sanitary milk project is a good example. More than 4500 dairy barns have been given a good cleaning and disinfection by the 1000 men employed in this project.

Pest infested apple trees have been cleared away by 1500 men at work on the pest control project.

Records in the Department show that 6000 men and women have worked in the removal of old apple trees, in the control of pine blister rust, in cleaning up dairy barns, in corn borer control, in fire prevention, in mosquito control, and in knitting projects.

ESSEX FARMER AND HOME MAKER

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HATHORNE, MASS., MARCH 1934

NO. 3

Unit Courses in Home Grounds Improvement

The first session of the new Swampscott class in home grounds improvement was held at the floriculture building of this School on Wednesday, March 14, with thirteen members enrolled. This is the ninth group of home gardeners to meet in the past several years for organized class and project work in gardening.

The first Essex County class in home grounds improvement is forming, with members enrolling from Topsfield, Boxford, Georgetown, Rowley, Wenham, Hamilton, Ipswich and other midland towns. The first meeting of this class was held at the School on Wednesday, March 28. A complete description of the course, a calendar, and an enrollment blank are available for the asking.

The aim of the unit course is to inspire, guide, and instruct members of the class in planning, laying out, planting, and maintaining their home grounds according to accepted standards of landscape design and sound gardening principles. The objective is measurable improvement in the designs and plantings of the grounds and in the gardening practices of the student gardeners.

The course embraces all the important gardening operations and many minor items. Lawn grass and roses are the only plants accorded real prominence on the calendar. The relative emphasis placed on any of the topics can be varied to meet the desires of the class.

The plan of the course is seasonal but more anticipative than contemporary. It assumes that a real gardener is actively interested in her garden in season and out, and it deliberately ignores the annual recurrence of a spring garden fever epidemic.

Classes are conducted at the School in the floriculture building unless otherwise arranged for and students notified.

A nominal registration fee is collected to help defray the cost of conducting the course and visiting the gardens.

The course is conducted by H. Linwood White, Instructor in Floriculture, and C. S. Wright, Instructor in Ornamental Gardening.

Anyone desiring information with regard to the Catskill Strawberry, formerly known as No. 4435, is requested to communicate with Director F. A. Smith of this School. The plants are vigorous and yield heavily.

New Source of Income For Farmer

The Conservation Committee of the Legislature recently proposed a new source of income for farmers and country people. The suggestion, if passed, would make it possible for farmers to raise pheasants, quail and other upland game birds and treat them as a money crop by releasing them for hunters to shoot.

One provision of the bill, which is numbered House 476, is that only 60% of the game that is released by the farmer can be shot on his land during the season. Forty per cent is thus left for seed for the next year's crop, or permitted to escape into unenclosed lands.

The bill is in line with the conservation and game policies recently announced by President Franklin D. Roosevelt.

Confirming the action taken at a recent conference, April 15 has been set as the closing date for the corn-hog reduction campaign in Massachusetts.

Crop Production Credit Loans

Application blanks for crop production credit loans are now in the office of County Agent F. C. Smith. Anyone interested in securing information pertaining to loans should visit the County Agent in person.

Loans will be made for crop production purposes only, and must be paid back at a 5½ per cent of interest.

George C. Upton of Lowell, secretary of the Lowell Production Credit Association, with headquarters at 9 Central St., announces, through a superior office, that loans are ordinarily made for the crop-growing season, but loans to buy dairy cows may be made for one year, subject to renewal if monthly installments sufficient to liquidate the debt in 24 to 30 months are met promptly.

Applications may be secured through members of the county committee as well as through the County Agent. Comprising the committee, are George Cooper, Newburyport; Ralph Gaskill, Topsfield; and William Carlton, Danvers.

Fine Weather Favors Large Crowd At Farmers' Day

Discussions of pertinent agricultural problems by prominent speakers drew nearly eleven hundred visitors to the Essex County Agricultural School March 21 for the observance of Farmers' and Homemakers' Day.

Dr. Hugh P. Baker, President of the Massachusetts State College, prophesied a bright outlook for agricultural conditions in Massachusetts, with the provision that farmers intensify their production of crops.

Erwin H. Forbush of Springfield explained that the Production Credit Association is conducted on a sound, business-like basis. Any individual farmer may borrow money through the association for crop productions with an interest rate of 5 1-2 per cent. The Production Credit Association is affiliated with the AAA inasmuch as both are interested in controlling surplus crops. Hence loans are made cautiously.

Sectional meetings in the afternoon were of a nature interesting to homemakers, poultrymen, dairymen, fruit growers, market gardeners, and home gardeners.

Miss Edith Jamieson of Cambridge discussed the care of clothing through laundering. Miss Mary Pozzi, Extension Specialist of the Massachusetts State College entertained homemakers with recreational ideas for leisure time.

Clarence E. Lee of the Beacon Milling Company, Cayuga, New York, stressed the importance of a sodded range for pullets. He added that turkeys grown on platforms average one pound heavier than those started on wire and moved to grass ranges.

R. S. Speck of Rockport and Warren Chadwick, West Boxford, were voted new directors of the Massachusetts Dairymen's Association.

In the fruit section, Professor W. H. Thies of the Massachusetts State College illustrated a lecture on picking and handling apples. Warren D. Whitcomb warned fruit growers against apple maggot. J. K. Shaw, research professor at the State College, recommended Melba, a new variety of apples, for home use or roadside stands.

W. D. Whitcomb, of the Waltham Field Station, told vegetable gardeners that the best method for controlling Mexican bean beetle is the use of 1 1-2 pounds of magnesium arsenate, 50 gallons of water and 1 pound of casein or flour.

(Continued on page 3)

Essex Farmer and Homemaker

HATHORNE, MASS.

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Calendar

April 4—Athletic Banquet and Alumni Dance at the School.

April 6—Joint assembly in agricultural hall.

April 10—Annual Leaders Meeting in the Extension Department.

April 19—Patriots' Day.

April 20—Mrs. Harriet J. Haynes conducting a meeting on tourists' homes at the School.

"Education is Living"

The most important thing is not that "education is a preparation for life" but that "education is living, and living is education", is the opinion of Franklin E. Heald, supervisor of teacher training in Massachusetts. This he expressed to a group of adults whose attendance at evening courses in their particular fields of agriculture had marked their interest in education.

"In learning, we attempt to do something and encounter a difficulty. The way we face that difficulty determines not merely our success or failure on that job but still more determines whether we learn anything or not."

To come down to reality, "an adult farmer must be observant and keenly alert for any index suggesting a

(Continued next column)

Reduction Program For Dairy Industry

A reduction of from 10 to 20 per cent in production in the dairy industry is the aim of the federal agricultural adjustment administration in its new plan recently announced. Just how this reduction will be accomplished will be left to the individual producer.

In fact, the whole program, says Willard A. Munson, director of the Massachusetts State College Extension Service, will have the approval of dairy farmers before it is finally accepted. There will be a series of regional meetings beginning April 2 at which the program will be presented for discussion.

Additional features of the dairy relief program will be distribution of surplus areas to needy farm families, and the eradication of animals as part of the disease-control programs.

It is expected, in addition to the higher prices which are likely to result through balanced production, that there will be benefit payments at the rate of about 40c for each pound of butterfat or about \$1.50 for each surplus 100 pounds of fluid milk reduced.

The program will be financed by a processing tax, starting at 1 cent a pound on butterfat and advancing to 5 cents a pound as the supply comes under control.

The proposed program calls for the expenditure of at least 165 million dollars with the possibility of at least 300 million dollars.

News of the School At A Glance

March 6

Professor Charles Whitney, artist, lecturer, and philosopher was the guest speaker at a joint assembly of the agricultural and homemaking departments. Illustrating his talk on the subject of recognizing beauty in the commonplace, with black board drawings and bits of quoted verse, he won the admiration and respect of his audience.

March 7

Reverend Emory R. Betham of Salem, a guest speaker at the School, talked on the subject of Japan. He stressed the fact that the Japanese, as a people, are a peace-loving race.

March 9

The Senior dance was highly successful in a hall representing "under the sea".

change. He must learn as long as he remains in business, and occasionally he will profit by a formal attack on some problem through the medium of a course prepared for adult learners who are also workers. This course he considers an important incident only in the perennial schooling of daily learning."

Student Activities

On March 13, Dora Winchester of Saugus, a student in the agricultural department, scored as highest individual in the judging and identification contest at the Boston spring flower show.

The Essex County team, comprised of Alexander Dion, Salem; Lucille Legasse, Haverhill, and Kenneth Nolan, Danvers, merited a cup for second place.

A silver medal was awarded to Dora Winchester for placing first in the identification contest, and a bronze medal to Kenneth Nolan for being high man in the judging contest. Kenneth White of Lynn, and Alexander Dion of Salem, each received certificates for third and fourth placements in judging.

On March 23, Miss Virginia Larrabee of Beverly, and a student in the agricultural department of this School won second place in the annual F. F. A. State public speaking contest. Because young men, only, are eligible to membership in the national F. F. A. Association Miss Larrabee will not compete in the regional and national contests.

Thomas Swiniarski of Peabody and Fred Basile of Haverhill placed second and fourth respectively in the second elimination poultry-judging contest at Amherst on March 23. The third elimination contest, which precedes the state finals, will be held in Brockton next fall.

Future Farmers of America

County chapters were represented at a national F. F. A. meeting in Amherst, March 24.

Of the new officers elected to the national organization, three were Essex County boys: Treasurer, Kenneth Nunan, Reporter, Forrest Haynes, and member of the executive committee, Edward Bessom.

The following five Essex County students were elevated to the degree of Bay State Farmer: Franklin Edwards, Beverly; Forrest Haynes, Haverhill; Walter Licht, Lawrence; Ralph Broughton, Danvers; and Joseph Andreas, Beverly.

Alumni Notes

John Kachadorian, class of 1932, visited the School on April 2nd. John is completing the 2-year course at Stockbridge in one year and will graduate in June.

Kenneth Dawkins of Groveland, class of 1928, was another recent visitor at the School.

Aubrey Vaughan, a former student, is employed at the Winsor County Cooperative Farmers' Exchange at White River Junction, Vt. Working with him, is William Chase, class of 1933.

Time To Start Indoor Seed Planting

Flowers which are to be transplanted the last of May should be started indoors now.

There are two reasons for starting flowers indoors. Some of them are so tender and have such long growing seasons that they won't produce blossoms if they are planted outdoors. And other flowers that will bloom if the seeds are sown outdoors will blossom earlier if they are started inside during cool weather.

A mixture of ordinary garden loam, compost, and sand is the best kind of soil for hot beds and for starting flowers indoors.

The disease known as "damping off" which has a habit of killing seedling plants just as they come up is a condition of the soil which may be remedied if the soil is sterilized either by baking, or boiling in water. For large quantities of soil, an easier way to sterilize would be to soak the soil in formaldehyde or a solution of bichloride of mercury. A new discovery shows that formaldehyde dust may be mixed with the soil.

Seeds may be broadcast over the surface of the soil and covered with sifted dry soil, or they may be sown in rows.

The soil will need to be watered with a fine-nozzled sprinkling can or a syringe.

A glass over the boxes will hold in moisture and at the same time let light through.

After the seedlings are up and have two real leaves they are ready to be transplanted. Most of them develop what look like leaves but they drop off after a few days. These are really cotyledons, and are a part of the seed. When the real leaves appear, the seedlings should be transplanted and set in another flat, an inch apart. They may need to be moved once more before they are ready to be set out of doors. With enough water and plenty of room they will get along all right.

—Condensed from "The Back Yard Gardener."

Bee Wise

Beekeepers are reporting that because the temperature failed to rise above 44 degrees for over a period of a month, they have suffered great losses of bees.

In order to build up the hives the addition of package bees with or without queens has been suggested.

For further information, beekeepers may get in touch with G. A. Meigs or the County Agent F. C. Smith at this School.

Poultrymen Learning To Tell Sex of Day-old Chix

The science of identifying sex in baby chix is being taught to small groups of men and women over Massachusetts this spring by Dr. Charles S. Gibbs of the department of veterinary science of the Massachusetts State College. This new science, acclaimed by many to be the most important advancement in poultry science in recent years, recently was introduced to America from Japan.

Japanese poultry scientists discovered a number of years ago that by proper handling of the baby chix it was possible to identify with reasonable accuracy males and females. A great deal of practice is necessary before an operator can become proficient at identifying the sexes, but some of the Japanese have become extremely successful.

Because of the time and practice necessary to develop speed and accuracy in the work, Dr. Gibbs does not believe that any of his pupils will be available for large scale commercial work this season, but by next season he feels certain that a few young men and women will have mastered the technique so that they can guarantee an accuracy of 90% or better. Already quite a number of poultry men in Massachusetts are sexing their own chix, and are attaining an accuracy of 80 to 90 per cent.

Radio Programs For April

Farm Forum WBZ 12:30 P. M.
April 9. O. C. Boyd. The War on Apple Scab.

April 16. R. W. Donadson. Planting the Potato Crop.

April 23. S. R. Parker. The Farmer, the Banker, and Uncle Sam

April 30. K. L. Bullis. Poultry Parasites.

Home Forum WBZ 1:50 P. M.
April 9. R. B. Parmenter. Beauty Spots in Massachusetts.

April 16. A. M. Davis. Shrubs Worth Knowing.

April 23. A. M. Davis. The Flowers that Bloom in the Spring

April 30. Grace B. Gerard. Brighten the Corner.

Massachusetts WGY Talks
12:30 P. M.

April 6. Mrs. E. C. Page. Little Shirts for Little Shavers.

April 10. J. H. Putnam. Dead Chicks are Dead Losses.

New Bulletin

Leaflet No. 7, entitled "Pruning and Care of Shrubbery," may be had for the asking if applied for through the Massachusetts State College, Amherst.

Farmers' Day

(Continued from page 1)

Clinton Raymond of Beverly focussed attention on the importance of adding nitrogen as a top-dressing to clover and rye to cause the cover crop to decay when turned under.

Dr. O. C. Boyd said that damping-off of seedlings may be controlled in hot beds and in the fields with the application of formaldehyde dust for the former, and red oxide of copper for field control. Tomatoes, he believes, should be sprayed or dusted with Bordeaux mixture regularly in August and September to control late blight.

In discussing base plantings, Seth Kelsey, emphasized the importance of considering the locality of one's home, the type of house, surroundings, whether wild and natural, or highly civilized, and the character of the soil. It is his plea that home gardeners consider mass balance in laying out their landscape, rather than absolute symmetry.

Donald White of Wakefield, in explaining the use of annuals and perennials in the rock garden warned his listeners to beware of the cemetery and museum types of rock gardens. He also insisted that one should follow the contour of the ground.

Education and trade exhibits held prominent positions in the affairs of the day.

Management of Tourists Homes — Wayside Stands

At the first of a series of meetings Mrs. Harriet J. Haynes recently gave an introduction to her lectures on the organizing and managing of tourists' houses and wayside stands.

Because there seems to be a need for reliable, sanitary, and attractive tourists' homes in the county, Mrs. Haynes suggests that women who are interested in using their extra rooms for transients should fit them attractively and invitingly.

Advertising is an essential means of arousing interest. High standards are necessary for retaining interest. Tourists homes may be advertised through signs, match cases, cards, or illustrated folders. However, a personal word in reference to the high standards of a particular tourists' home or wayside stand is more valuable than any other form of advertising.

The grounds surrounding a tourists' home should be simple but artistic. Base plantings and flowers about the house are inviting.

The rooms ought always to be home-like, clean and comfortable. A neutral wallpaper is suggested, as are small, easily cared-for scatter rugs and curtains.

At the next meeting, on Friday, April 20, to be held at this School, (Continued on last page)

Favorite Recipes

Oatmeal Cookies

- 2½ cups sugar 2 teaspoons ginger
2 cups fat 2 cups seeded raisins
6 cups rolled oats
2 teaspoons baking soda
4 eggs
4 cups flour, or 2 cups flour, and
2½ cups crumbs
1 cup sour milk
2 teaspoons cinnamon
2 teaspoons salt

Cream fat and sugar. Add eggs, well beaten, and rolled oats. Sift all dry ingredients and add alternately with the milk. Add raisins and mix thoroughly. Drop from teaspoon on greased baking tins. Bake in moderate oven from ten to twelve minutes. Makes 100 cookies.

Baked Cheese Sandwich

- 6 slices whole wheat or graham bread (½" thick)
2 or 3 eggs 3 cups milk
1-3 to 1-2 lb. American cheese (tub)
¼ teaspoon salt

Butter 3 slices of bread. Put a fairly thick slice of cheese between 2 slices for a sandwich, taking care that the buttered slice is on top so it will brown. Triangle sandwiches so they will fit easily into buttered baking pan. Beat eggs slightly. Bake until solid and nicely browned. This will take 20 minutes to one half hour.

Apple Snow Jello

- 1 pkg. raspberry jello
1 c. cold applesauce (sweetened)
1 pt. boiling water
1 egg white (stiffly beaten)
1 tsp. lemon juice

Dissolve jello in boiling water. Chill. When slightly thickened turn into sherbet glasses, filling them 2-3 full. Chill until firm. Add lemon juice to applesauce. Fold in egg white. Pipe lightly on jello. Serve immediately.

Apple Custard

- 1 or 2 apples (large, tart) custard
1 tsp. syrup granulated sugar
Pare, core and bake thoroughly the apples, having filled the cavities with 1 tsp. syrup and granulated sugar. Cool and serve with custard.

Coupe Santa Maria

- 1 pkg. orange jello
½ c. grapes (halved and seeded)
1 pt. boiling water
2 peaches (drained and diced)
1 tart apple (diced)

Dissolve jello in boiling water. Fill sherbet glasses ½ full or fruit. Pour over enough jello to fill glasses 2-3 full. Chill until firm. Serve with custard sauce or with plain or whipped cream. Serves 6.

Tourists Homes

(Continued from page 3)

Mrs. Haynes will discuss foods, prices, portions, and buying. Any women interested in this project are cordially invited to attend the meetings. Mrs. Haynes is well-known for her beneficial advice in problems dealing with tea-room management.

Canned Foods Are Safe

"Canned foods are probably the safest foods which we eat," Dr. Carl R. Rellers of the horticultural manufactures department of the Massachusetts State College recently told golf club managers meeting at the first annual recreation conference at M. S. C. Furthermore, the quality frequently is better than shipped-in fresh foods, because the fruit or vegetables are grown in regions where each product grows at its best, they are harvested at just the right stage of maturity and are canned in a very few hours after harvest.

The tin can is really mostly sheet steel with a very thin coating of tin. Even though the acids of the food might dissolve part of the tin or the steel, there would be no danger in eating the foods; in fact, the iron is needed in the human body and is often lacking in the ordinary diet.

"Swells"

or cans of food which have swollen ends, are generally regarded as unsafe, but this is not always true, Dr. Fellers says. In the case of fruits, the swell may be caused by hydrogen gas developed by the action of the fruit acids in the can; in this case, the fruit is perfectly safe to eat. But when canned fish, vegetables or meat develop "swells" it is a sign of spoilage, and the food should not be tasted.

Black or brown discoloration on the inside of the can is caused by sulphur from the proteins of the food uniting with the iron and tin of the can. The substance is perfectly harmless although it is unattractive in appearance.

Extension Classes

Under the direction of Mrs. Mary M. McIntire, Home Demonstration Agent, cotton dress groups are starting in Hamilton, April 10 and in Manchester, April 6.

Nutrition groups, under the direction of Miss Vera Griffen, director of the Essex County Health Association, are planned for the months of April and May in Saugus and Peabody. Mrs. McIntire will have charge of the meetings.

Arnold M. Davis, of the Massachusetts State College, started his first group in garden maintenance at Topsfield, April 2. Classes were also begun in Ipswich, April 3, and Rockport, April 4. The course consists of three meetings in each community.

Chairmen of the county groups, are Mrs. George Dow, Topsfield; Mrs. John Goodhue, County Road, Ipswich; and Mrs. Frank Jewett, Jewett St., Rockport. Anyone interested in joining the classes is asked to communicate with the town chairman.

Mrs. Esther Cooley Page, Extension Specialist, will supervise a cotton dress project in Ipswich on April 11, May 2, 9, and 16. All day meetings will be held at the Episcopal parish house.

A Virile Race

May E. Foley

Nutrition Specialist

One of the leading authorities on diet, Doctor McCarrison of England, spent nine years among the Himalayan tribes of India. Writing about them, he says they are a virile and fertile race and live to a good age. They have none of the diseases of civilized life, such as appendicitis, tonsillitis, rickets and cancer.

In describing their freedom from these common diseases of civilization he gives the following explanation:

"Their diet consists of natural foods, including whole meal, green foods, fruits and milk, a diet amply provided with the necessary vitamins, minerals, and residue for maintaining good health. He contrasts this wholesome and natural diet with the white bread, meat and sugar diet, which is deficient in vitamins, salts and bulkage.

More vitamins and minerals should enter into the diet. One way to get them is to have a vegetable garden. Not only will it provide a supply for summer months, but a few extra rows may be planted for canning and storing. The family always uses more vegetables if they have a garden. This adds to the general health and subtracts from the food expenditures.

For canning, plant an extra row of beets, carrots, tomatoes, beans and greens, and for storing, cabbage, beets, carrots and turnips.

No vegetable is easier to can than tomatoes. Since we may substitute them for oranges, it is well to have a plentiful supply in the storage cupboard when oranges are expensive and hard to get.

Green beans are satisfactory for both immediate use and canning. If a few hills are planted every two weeks or ten days during May and June, this should insure a supply over a long period, both for use at once and for canning.

Course in Meat Canning

Should there be a demand for instruction in meat canning in Essex County (including beef, pork, lamb, etc., exclusive of poultry), it will be met by William R. Cole, extension specialist in horticultural manufactures of Massachusetts State College.

Requests should be sent immediately to Mrs. Mary M. McIntire, Home Demonstration Agent, at the Essex County Agricultural School, Hathorne.

ESSEX FARMER AND HOME MAKER

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HATHORNE, MASS., APRIL 1934

NO. 4

Broiler Facts For

1934

J. Stanley Bennett

The cost of broilers is often underestimated by those who produce them, particularly those who do not specialize in them. With feed costs higher than one year ago by about 40%, it is costing definitely more to produce them now than then.

Considering a unit of 300 chix, brooded in a colony brooder house, (and this is a common unit in Massachusetts) we have the following items of cost:

300 chix @ \$14, \$42.00; feed for 12 weeks, \$73.00; coal \$12.00; litter, \$6.00; miscellaneous cash costs, \$2.00; depreciation and other overhead \$15.00. Total cost for 12 weeks, \$150. Cost of cockerels only, (12 weeks) \$75.00.

If with good growth and low mortality there are 400 pounds of cockerels to sell at 12 weeks of age, the cost to the producer exclusive of labor would be about 19 cents per pound live weight. The figures given are of course bound to vary with individuals in regard to price of chix and amount of fuel required, but as these items decline, later in the season the brooder price tends to decline also. In order to get paid for his labor, the producer would have to get 25 cents per pound live weight for his broilers. Are you going to sell yours for less than the cost of production? If you find the price low when you have birds to sell, put up all you can in jars for next winter's use. They will be tasty, convenient, and an excellent investment.

Fruit Notes

If you find red mite eggs (masses of small red eggs which look like brick dust) on your fruit trees, particularly on the under side of the small limbs and fruit spurs; or if you find scales (round or oyster shell shaped gray deposits) do not neglect to apply an oil spray just as the buds are showing green.

The early set strawberry plants make the most and best runner plants. Consequently the resulting

Athletics

The traditional championship of county agricultural schools was won this year by Essex Aggies for the sixth consecutive year. The decision resulted from two victories over Norfolk and one over Bristol.



Top row: Sparks, Mgr.; Perkins, C; Santin, G. Middle row: Coach Couhig; Donahue, G; Bowden, F; Haynes, C. Bottom row: Duval, G; Desmond, F; Porter, G; Brindle, F; Spakas, C; Norwood, G.

The boys awarded letters for their activities in basketball were as follows: Norton Bowden, Stanley Bickford, Gildo Santin, Joseph Spakas*, Sidney Porter, Joseph Desmond, Albert Brindle*, Lewis Norwood, Francis Sparks, and James Duval*.

The boys awarded letters for their activities in football were: Wesley Bacheller, Norton Bowden, Joseph Desmond, John Donahue*, Albert Collins*, Edward Glowacki, Benjamin Gregory, Joseph Lydon, Andrew Murphy, Lewis Norwood, Sidney Porter, Arthur Pohju*, Bernard Reilly, Francis Sparks, Kenneth White and Joseph Andreas*.

* Awarded sweaters as well.

bed gives the most and best berries during the bearing year. Set them as soon as the leaves show green and the soil can be prepared.

Early and thorough cultivation in the raspberry plantation will not only keep the weeds from starting now but will make it much easier to keep out the weeds later in the season.

If you find that the severe winter has cracked the bark on the limbs or

Good Orchard Culture

Important

A warning to fruit growers against making economies that will prove to be expensive in the long run is sounded by W. H. Thies, extension pomologist of the

Massachusetts State College. With the exception of omitting the oil spray on badly injured trees, he suggests the usual program of spraying and fertilizing until blossoming time at least. By that time more about the condition of the crop and of the trees will be known. There is some indication of injury to apple spurs, caused by the cold weather, and in anticipation of a light crop, an occasional grower

may be tempted to omit spraying, tillage, and fertilizing. In the event of a light set of fruit, some reduction in the later sprays may be all right, but too much economy this spring in those items which have to do with tree vigor is not advisable in the opinion of Mr. Thies.

Pre-blossom sprays intended to protect the tree against apple scab should not be omitted. After petal fall, it will be possible to make a reasonable estimate of the size of the prospective crop in each orchard, and to determine whether or not all of the later sprays, intended for the protection of the fruit, should be applied.

Fertilizer applications should be made as usual, even though the crop should happen to be a total loss — which is not expected. Trees will require a spring tonic of nitrogen along with a good moisture supply as usual. Breaking up the sod with a disc harrow in the case of heavy sod orchards is a practice recommended by the State College men. This should be done within the next week or ten days as a means of conserving moisture and nitrogen for the tree. Removal of the weaker wood along with a moderate thinning of the top is also recommended instead of drastic pruning.

Trunks of your fruit trees, carefully tack the bark in place with large-headed tacks and thoroughly cover the wounds with grafting wax in order to encourage the healing.

Essex Farmer and Homemaker

HATHORNE, MASS.

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Calendar

May 1-15-22—Cotton dress project for demonstration groups in Hamilton directed by Mrs. Mary M. McIntire, Home Demonstration Agent.

May 2-9-16—Cotton dress project in Ipswich at the Episcopal parish house. All day meeting led by Mrs. Esther Cooley Page, State Clothing Specialist.

May 3-24-31—Nutrition project in Peabody under the supervision of Mrs. McIntire.

May 4-11-25—Cotton dress project in Manchester under the direction of Mrs. McIntire.

May 7—Homemaking department re-opens after spring holidays.

May 8-29—Nutrition project in Saugus led by Mrs. McIntire.

May 10—Annual meeting of women's Extension Department.

May 16—Home Grounds Improvement Project with Arnold M. Davis, State Specialist. Topsfield in afternoon, Newburyport in evening.

May 17—Home Grounds Improvement with Mr. Davis at Ipswich.

May 19—4-H Dress Contest at this School.

Homemaking Note

Irene Burbeck, president of the Echo Club (Essex County Homemakers' Club) attended the recent annual meeting of the Massachusetts Home Economics Association, representing the student branch of the National Association. Student representatives from Massachusetts State College, Simmons, and Framingham State College were also present.

Why Not An Alumni Journal?

Mrs. Marie Murray (Marie Pension, class of 1923), sends in the following communication:

"What does the Essex Aggie Alumni Association do for me", is a very common question. Committees are appointed in November to work for the association and the following September or October a meeting is called to make a few plans for the reunion and that is all there is to it. Why can't we do more? What we need is a good shaking up.

I would like to see the association have a newspaper all its own, similar to the "Farmer and Homemaker" known as the "Alumni News" or the "Alumni Directory." With a little co-operation from interested graduates I feel sure that such a paper would be possible.

There are nearly one thousand graduates from Essex Aggie and only a small percentage of them belongs to its alumni association. It is my aim to see the association become a real credit to us as well as to the School.

Many of our graduates are in business for themselves. Why not patronize our own alumni? We could if we knew just which ones are in business and where they are located. An alumni directory would help to locate possible chances for employment and it certainly would help to locate lost alumni. One or two cannot reach all the graduates so I am sending out a request for volunteers from every class to help make this paper a success. Don't wait to be elected. What we want is volunteers to get ads from other graduates.

If you are interested in this paper or have any suggestions to make, write a card or letter including your name and address, with your year of graduation to Mrs. Marie P. Murray, Grove St., Lexington, Mass., and you will be furnished with the names and address of your class or those who live nearest you."

Third Annual Athletic Banquet Tremendous Success

After a third successful athletic banquet which was held on April 4th, members in charge have concluded that future banquets, followed by an alumni dance, can not be dispensed with.

Alumni Notes

Mrs. James B. Walsh, Jr., (Rebecca E. Ferguson of the class of 1922) is employed at the Danvers Bleachery. Her address is 79 Northend St., Peabody.

Mary Margaret Libbey, class of '22, is employed by the T. W. Rogers Co., Lynn. She is living at 8 Summer St., Ct., Nahant.

Mrs. Thomas E. Kennedy (Florence M. Pension, class of '22) was a recent visitor at the School. Her address is Allerton St., Lynn.

Benjamin Robinson of Georgetown, a former student, is recovering from a broken arm received while driving an artesian well.

Ruth Bresnahan, class of 1931, is employed at Manahan's Boylston St. store, Boston.

Madeline Johnson, class of 1933, is working at the North Shore Country Club.

Janet Brander, a former student, and her sister Lois, of the class of '29, will be at the Ipswich Tea House during the summer season.

Betty O'Brien, class of 1932, Ellen Collins, '33, and Mary Kearns, '32, recently visited the school. Betty is employed by the New England Telephone Company in Salem. Ellen is studying commercial art at the Boston Trade School.

Rose Noonan, class of 1931, is about to complete her course at the Faulkner Hospital, Jamaica Plain. She plans to study further in New York next fall, majoring in surgery and obstetrics.

Ruth Hall, '32, has finished her probation period at the Newton Hospital.

Mildred Roberts, class of 1931, has just accepted a position at the Work Box, Lynn.

Stanley Chlebowski, class of '32, recently visited the school and left a new address: River Rd., Andover. He is employed by the town of Andover.

Warren Shiers, class of '30, and his brother Roland, class of '31 are working on a dairy farm in Maine.

It is becoming customary for leaders in the athletic field to speak at the banquet. This year Clarence DeMar, famed marathon runner, told thrilling tales of his adventures.

Among the many alumni seen at the banquet and dance, were: Robert Bolcome, Richard Poirier, Sidney Batchelder, Edna Flye, James Forrest, Hyman Weinstein, David Carter, Woodrow Follett, Mr. and Mrs. Parker Ryan, Bernard Collins, Rita Goddard, Charles Elwell, Roy Cushing, George Bulgari, Alena Bradford, William Costley, Katharine Ilsley, Katharine Ingoldby, Leonore Alwood, Clifford Sewall, Viola Messer, Mrs. Richard Murray (Marie Pension), Mrs. Florence Kennedy (Florence Pension), John MacKenzie, A. Donald Kochakian, Fred Keezer, Malcom Spalding, Mary Lond, and Horace J. Shute.

Much credit for the success of the banquet is due Horace J. Shute, Secretary of the Alumni Association and

Heavy Loss of Bees During Winter

Dr. B. N. Gates
Inspector of Apiaries

It is estimated, from a preliminary survey on April 1 that the mortality among colonies of bees is probably higher than it has been for a number of years. Exact figures are not available. The indications are, however, that the winter mortality among colony-bees will exceed 40 per cent. It is also probably true that the mortality within colonies which remain live is likewise proportionately high.

With these facts in view, two courses should be taken by the bee-keepers. The first is to prevent any possible spread of an infectious bee disease. The second is to do all that is possible to stimulate and protect the remaining live colonies, so as to mature them as rapidly as possible for service in the orchards during May, and for honey production later in the season.

It is the duty of each bee-keeper to determine at once whether any colonies have succumbed. The hives and equipment of such colonies should be removed at once to a tight building. The equipment should then be cleaned up and salvaged. If healthy, it should be made ready for re-use. If diseased, it should be disposed of, according to the prevailing practices. It is contrary to the Massachusetts Apiary Inspection regulations, Section 2, to leave exposed out of doors, any hive or similar bee equipment not actually occupied by a living colony of bees.

An especially strong demand for bees to be used in orchards during fruit bloom in May is anticipated, hence, colonies of bees which have survived the difficult winter should be stimulated and fostered. Young bees reared in early April will be of service in the orchards, while young bees reared about the first of May will be of doubtful value. The Inspector of Apiaries if addressed at Room 136, State House, Boston, will be pleased to respond to any questions.

Editor's note: Essex County bee-keepers may communicate with G. A. Meigs of this School for information regarding the bee situation.

Dairymen's Opinions Sought by County Agent

The County Agent, F. C. Smith, would appreciate any statements or comments from distributor-producers and dairymen in general as to their attitude in regard to the milk situation.

The processing tax, to be collected by commissioners of internal revenue from distributors will be paid to producers who agree to reduce their production from ten to twenty per cent below their average sales of milk during 1932 and '33.

Radio Programs For May

Farm Forum WBZ 12.20 P. M.
May 7, O. C. Boyd. Protecting Trees and Shrubs Against Diseases.

May 14. A. M. Davis. Spring Time in the Front Yard.

May 21. J. C. Graham. Keeping Poultry Healthy and Happy.

May 28. W. R. Cole. Storage Plans for 1934.

Home Forum WBZ 1.50 P. M.
May 7. Mrs. Annette Herr. The Consumers' Council.

May 14. Mrs. E. C. Page. Goods for Your New Clothes.

May 21. Mrs. E. C. Page. Clothes for the In-Betweens.

May 28. Mrs. E. C. Page. For the Wings of a Moth.

Massachusetts WGY Talks
1.50 P. M.

May 1. A. M. Davis. Dolling Up Your Front Yard.

May 17. F. H. Branch. Farm Facts from Farm Accounts.

Emergency Loans

Emergency crop loans made directly from Washington have been reduced from a minimum of \$25 to \$10. The interest rate is 5½ per cent.

Such funds are available to farmers for growing crops and for securities based upon mortgages on crops or livestock.

Application blanks may be secured through the County Agent F. C. Smith at this School.

Groom Your Lawns

It behooves those of you whose lawns have a sad, ruffled up appearance with bare ground showing through, to do some grooming at once.

Bumps and humps left from grass plants which have been heaved up after the winter's freezing and thawing, may be rolled down. Rolling also presses the roots back into the ground.

After the rolling, all dead grass, leaves, sticks, bones, and other stray bits should be raked away.

Seeding will cover the bare spots if they are numerable.

If the lawn is weedy a good fertilizer feeding is sulphate of ammonia.

The Massachusetts State College is recommending a mixture of chemical and organic fertilizers for lawns. 30 pounds of nitrate of soda and 75 pounds of cottonseed meal will not only give the grass an early start but will keep it growing all summer. 18 pounds of the mixture to 1000 square feet of lawn is the amount for good lawn feeding.

A new leaflet, No. 85, "Facts on Lawn Management" may be secured through the State College, free.

New Bulletins

Leaflet No. 85, entitled "Facts on Lawn Management", may be had for the asking if applied for through the Massachusetts State College.

Extension leaflet No. 150, entitled "Massachusetts Pastures", published in November 1933, is recommended by the County Agent. It may be secured through the Massachusetts State College.

Spray schedules are now available through the office of F. C. Smith of this School.

A pamphlet entitled "Vegetable Varieties for Massachusetts Gardeners" compiled by Paul W. Dempsey of the Waltham Field Station may be had for the asking upon communication to the County Agent.

The eleventh annual summary "Receipts and Sources of Boston Food Supply" is being distributed by Miss Eleanor Bateman, State House, Boston. In it are answers to the questions: What states fill Boston's beanpot, what countries fill her sugar bowl, who churns the butter for her rolls, whence come the strawberries for her January shortcake, when do the first "native" peas or blueberries arrive in market, and when are locally grown, vine ripened tomatoes in most liberal supply?

Leaflet 148, "Bees for the Beginner," may be obtained from the Extension Service, Massachusetts State College, Amherst.

"Grape Growing in Massachusetts" is a bulletin including the different systems of pruning — particularly timely now. The Massachusetts State College will send it to anyone expressing a desire for it.

Forestry Facts

Now is the time to cut fence posts for boundary fences before the sap rises.

Order your seedling trees now. They should be set out as soon as the frost leaves the ground.

A training class in radio communication for representatives of the nine National Forest Regions has been initiated by the United States Forest Service at the Forest Service Radio Shop in Vancouver, Washington.

A recently approved bill makes it publicly lawful to establish fish and game sanctuaries in National Forests.

Tent caterpillars, gypsy moths and brown tails will soon be astir. It's not too late to scout your forest land.

Basketball Awards To Girls

Awards for activities in basketball were made to the following girls in the homemaking department: Sara Munroe, Captain, Betty Johnson, Marion Hammond, Irene Burbeck, Mary Peterson, and Mary Swiniarski.

Housecleaning Hints

Suggested by Mrs. Harriet J. Haynes
State Specialist

Grease spots in wall paper can sometimes be removed by placing a piece of blotting paper over the spot and placing a warm iron against it. The iron melts the grease and the blotting paper should absorb some of it. For more stubborn grease spots, French chalk or magnesia can be used. These materials may be put on dry or in the form of a paste. It is brushed off after a time and usually takes the grease with it.

Painted walls can be kept clean longer if they are starched. A thin starch solution is made and applied with a wide brush.

For cleaning badly soiled woodwork, Mrs. Haynes suggests a cleaning solution made of 2 tablespoons of mild soap powder or small pieces of soap, 3 tablespoons of turpentine mixed in one quart of hot water. This solution may be applied with a cloth or sponge, and rinsed off with clear water.

Carpets and rugs that have become dull and dingy may be cleaned with a soap lather. Mrs. Haynes suggests dissolving soap in water and whipping it with an egg beater, until it makes a foamy lather. This lather is put on the rug with a soft brush and worked in thoroughly, then rinsed with a cloth rung out of warm water.

Grease spots may be removed from rugs or upholstery with carbon tetrachloride or some other grease solvent.

Three Type Gardens

Suggested By

M. S. C.

Do you have an eat garden, an eat and can, or one which is eat, can and store? These are the three different types which are being recommended by the Massachusetts State College extension service to communities carrying the welfare garden work this year.

Some people, says William R. Cole, who heads up this work for the extension service, like a few vegetables to eat during the summer, hence the first type. Others find time to do a little canning, and still others like to can and store. This latter type gives the family a supply of vegetables the year around.

Plans as worked out by Mr. Cole are on the basis of the amount of vegetables needed by one person. These plans are free and are for anyone who asks for them. A 50 by 100 foot garden will supply a family of five with all the fresh, canned, and stored vegetables they need.

With an almost certain increase in the price of canned goods this coming year, those whose incomes have been cut should be very much interested in the plans, declare men at the State College. The plans also suggest

Cotton Dress Project

Twenty-four women assembled in Ipswich for the first cotton dress project, supervised by Mrs. Esther Cooley Page, State Clothing Specialist.

Stressing effective, well-understood and well-cared for sewing equipment as a means to successful dress-making, Mrs. Page suggested, in addition, that the equipment be well and conveniently arranged.

Choice of patterns should be made with thought of one's individual figure. Measurements should be taken with care. Pattern measurements may be altered if necessary, with small trouble. These and other facts were analyzed by Mrs. Page. Outlines of her lecture may be secured through Mrs. Mary M. McIntire, Home Demonstration Agent, at this School.

The second meeting of this project group will be held at the Episcopal Parish House, Ipswich, on May 2nd, at 10 A. M. Third and fourth meetings will be held on May 9 and May 16.

4-H Clothing Contest

May 19

Hand in hand with spring, march fine fashions. This year's 4-H club clothing contest on May 19th will be an exciting one with simplicity the predominating feature of spring frocks. Workmanship and appropriateness of line will be marked carefully when final judgment arrives.

Contestants must have been in 4-H clothing club work during the season of 1933-34.

Only girls competing in Senior Class II or Thrift Class III are eligible for the state contest.

Girls who have represented Massachusetts in the National Dress Revue are ineligible to enter any part of the contest.

Girls who have been first prize winners in county contests in previous years may not enter the same class of county contest again.

Those who have been first prize winners in the state in previous years may not enter the same class of state contest again.

No girl who has attended college more than one semester is eligible.

The contest will be limited to Junior, Senior, and Thrift classes, three distinct divisions.

Enrollment cards and further detailed information may be obtained from the County Club Agent, Horace J. Shute, Hathorne.

Essex County will want to make its usual outstanding showing at the State Contest which will be held on June 2nd at the Framingham Teachers' College. Three contestants to be chosen from the Senior or Thrift classes from each county may enter the State contest.

fertilizer requirements and other simple cultural practices.

Camp Gilbert Members

Practice Leadership

That Camp Gilbert is accomplishing its purpose which is training for leadership, is quite evident from questionnaire cards received to date. Counting all types of leadership work, there are 77 per cent of the 1933 campers who are active. By leadership we mean leaders or assistant leaders of 4-H clubs and other activities including grange, scouts, etc. Those in 4-H club work make up 69 per cent of the total. Of the 119 in the Camp during the summer of 1933, 103 or 90 per cent returned cards. 14 of these 4-H leaders are Essex County boys and girls.

A few comments taken from the cards will illustrate the type of work which these young people are doing: "Am leading a club and am also president of the county service club."

"Lead a 4-H club, am a member of the Scouts, belong to an orchestra, glee club, am president of county service club and of the senior class in high school."

"Am at college, but lead a canning club in the summer time. A few former 4-H club members get together occasionally to renew acquaintances. Can you suggest a method by which we might start something, for I certainly would like to find a way to continue my 4-H club work."

"I live in the city now and am a member of an older girls' club, but hope to join a cooking and sewing club just as soon as possible."

Apple Recipes

Apple Sauce Jello-Mold

- 1 pkg. Jello (any flavor)
- 1 c. boiling water
- dash of nutmeg or 1 tsp. lemon juice
- 2 c. applesauce (sweeten & strain.)

Dissolve Jell-O in boiling water. Add applesauce and nutmeg. Turn into individual molds. Chill until firm. Unmold. Serve with plain or sweetened whipped cream. Serves six.

Apple Marmalade

- 6 lbs. finely chopped apples
- 6 lemons (rind and juice)
- 1 1-2 ozs. preserved ginger
- 6 lbs. sugar
- 3 cups water

Pare and core tart, juicy apples before weighing. Boil sugar and water together 3 minutes, add lemon rind and juice, chopped ginger and apple, and cook slowly 2 hours or until the fruit is clear. This may be cooked in fire-less cooker.

Dairy farmers of Massachusetts are now better protected than they have ever been before from the losses resulting from non-payment by irresponsible milk dealers, according to a statement issued by the Dairy Division of the State Department of Agriculture.

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NO. 5

"Topics of the Times"

"Well, I see by the papers," said the White Queen, "that all the wheat in the Northwest is burning up."

Bill the Lizard jumped up and clapped his hands. "Oh goody, goody!" he cried, so that Alice could only stare at him in utter bewilderment, "And is there encouraging news elsewhere?"

The White Queen nodded.

"I should say there is," she said. "There is drought in Rumania. There are floods in China. There are earthquakes in Japan. And in Egypt everybody is looking forward confidently to the worst locust invasion on record."

Bill the Lizard jumped up and down and threw his cap in the air. "Hooray, hooray, hooray!" he cried. "If this keeps up it means we have turned the corner."

Poor Alice looked from one to the other. But I don't understand, she said. "All that food being destroyed."

"Exactly," said the White Queen. "Overproduction, you know."

"Yes," said Bill the Lizard, "the less the merrier, you know."

"How can it be good for everybody if there are fewer necessities to go round?" asked Alice.

The White Queen smiled patiently,

"Well, it's like slimming, Alice," she said. "You don't deny it's better for the average woman to weigh 130 pounds instead of 375 pounds do you?"

Alice thought the White Queen was putting it rather oddly.

"Well," she said, "moderate dieting is good because it makes you more active and alive."

"Exactly," said the White Queen. "Slenderizing makes you want to go places and see things."

"Yes," said Bill the Lizard, "Waist not, want you, you know."

"Do be quiet," said Alice. "I am not sure you ever know what you are saying."

Bill's feelings were hurt. He appealed to the White Queen.

"If you keep away from starches and take no water with your meals and preserve your youthful figure you can cover ever so much more ground? You can get around to four teas in one afternoon instead of two."

Alice shook her head, saying, "I don't see that four teas in one afternoon is such a great improvement on one."

"You mean they don't give you any tea anyhow?" asked the Queen. "Quite right. I do think the complete suppression of tea at afternoon teas (Continued on page 4, col. 2)

4-H Club Camp

On June 23rd one hundred 4-H boys and girls will again rise to the bugle reveille, sing through breakfast, study nature, try their skill at handicraft, swim, lunch heartily, join in sports, swim again, gather round a camp fire for evening stories, and tumble into bed at the sound of taps.

And for a whole week they will live outdoors at the 4-H camping grounds in Boxford where, in the past three years, they have worked and played together with the County Club Agent, Horace J. Shute.



Horace J. Shute, County Club Leader
Supervisor of 4-H Club Camp
Mrs. Everett Noyes, Camp Nurse and
sister of Mr. Shute

Old campers and counsellors will be back, and all 4-H boys and girls approved by their local leaders will be eligible to join in adding new members to the camp.

For specific details members are urged to communicate with Mr. Shute, Hathorne, Mass.

The best will be made better. Send in your applications soon.

Crop Loan Application Time Extended

Emergency crop loan applications may be sent in to Washington not later than midnight, May 31. This is an extension of the time limit, formerly announced as May 14.

Plant Hardiness

The past winter has been one of the most trying and exacting on plant life within the memory of many gardeners, fruit men and plant men. As someone has curtly said: "We must now entirely re-write our version of the hardiness of plants".

The amateur gardener without much deep study has of late years gone very intensively into the preparation of rock gardens, and many times they have been led to take great ventures in the matter of diversified plant material. Often times these rockeries have not been prepared with the best of judgment. At the present writing many of the owners are now mourners since in many rockeries a large percentage of the material is destroyed. This should result in the widest of observation and the dissemination of lists of plants which have proven to be utterly hardy, and from it selections and replacements for rebuilding these gardens should be established.

One of the noteworthy things which come to the attention of the writers is the hardiness failure of many of the imported strains of herbaceous perennials. Perhaps one example will suffice: Many commercial growers and amateurs have been purchasing seed and growing seedlings and establishing plantations of the newest and greatly improved varieties as for example, delphiniums. These strains have been produced in climates much milder than ours, having winters which seldom go near to the zero point. The results of using these seeds have been disastrous. Perhaps we had better patiently struggle with our own sorts which have a hardiness beyond question.

Hedges

It seems perhaps a pity to say such discourteous things about California privet hedges. They have been destroyed universally to the extent of miles and miles of rather well trained hedges. Pruning to the ground is only a makeshift. Cautious gardeners and nurserymen have long warned against the extension of the use of this variety. It was never intended for our latitude and its chief recommendation has been the cheapness with which the plant material can be purchased.

If one must confine himself to privet, why not grow the surely proven sorts? If one desires ultimately a tall, screenlike hedge Regel's privet (*Ligustrum lbota Regelianum*) could be used. If one desires a shorter hedge the Amur River privet (*Ligustrum Amurense*) is very dependable. If one (Continued on page 2, col 2)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION
SUBSCRIPTION 25c PER YEAR

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.
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Calendar

- May 22—Cotton dress project in Hamilton directed by Mrs. Mary M. McIntire, Home Demonstration Agent. 1.30 P. M.
- May 24—Nutrition project directed by Mrs. McIntire at the Cobbett/Junior High School, Lynn. Food habits will be stressed.
- May 25—Nutrition talk to group of Mothers in Haverhill by Miss Marion Swift.
- May 25—Cotton Dress project in Manchester High School. 1.30 P. M.
- May 28—Furniture Renovation Project. Peabody.
- May 29—Nutrition groups in Peabody. Subject: Tubercular children.
- June 1, 8, 15—Cotton dress project in Rowley (Danielsville) under direction of Mrs. Mary M. McIntire.
- June 9—4-H Field Day at this School.
- June 12—Better Homes Day (See article on page 4.)
- June 20—Parents Day in the home-making department.
- June 22—Homemaking department closes.

PARENTS' DAY
Homemaking Department
June 20
Program
to be
announced

PLANT HARDINESS

(Continued from page 1, col 3)
desires just a marker hedge, the Box privet (*Ligustrum Lodense*) answers very well. After the bitter experience of last winter the Japanese barberry, which has been worked to the limit but is now looking fine, certainly has its place.

Fruit Observations

Some of the most puzzling conditions exist in connection with fruit. Raspberries, which ordinarily pass trying winters in this latitude, seem to have come through with exceptional hardiness. Many varieties are alive to the utmost tip. On the other hand, strawberries have not fared so well. One usually thinks that beds covered with snow escape unusually well. This year winter killing has been severe, probably because of sheet ice which overcapped the bed for an unusually long time.

Some of the most outstanding injury has appeared in the tree fruit orchards. Peaches and nectarines are, of course, a complete loss and many growers have had to "dehorn" their trees, or in some cases remove them altogether. "Dehorning" is not an unmitigated evil since by judicious pruning one may trim his trees in good shape. The new growth promptly forms fruit buds and a promise of a good crop for the next year often results. The injury to some varieties of cherries and plums has become more apparent as the season has advanced. While the fruit buds pushed promptly many of the individual buds failed to open normally. Many of them fell during the blossoming period and in some cases the fertilization and stand of young fruits has been disappointing. Pears are very spotty. Some already have suffered the loss of fruit buds and others the loss of new wood. A forewarning of this is given when one prunes and finds the inside wood blackened.

Many orchardists, including the School, to some extent, have had peculiar injury to their apple trees. In some trees in our orchards the bark in the trunk and even extending to the larger limbs has cracked open and separated from the wood. The outcome is considerably in doubt. We have in some cases tacked the bark back against the wood with copper or galvanized large tacks or nails and we hope that the flowing sap may reunite the tissues. In the final treatment we have tried to wax the opening between the edges of the bark. This is a serious problem when a fifteen to twenty-five year old tree may easily be worth twenty dollars or more to its owner.

The whole story in regard to hardiness of apple varieties has not been worked out. Baldwin seems to have suffered severely, and while this variety originated in this region its limit of hardiness is not far north of this point in a winter like that just past. The bloom on Baldwin is light. McIntosh, which seems to be unquestionably hardy, on the other hand is showing a most excellent bloom.

Alumni Notes

Mr. and Mrs. Alton G. Perkins of Peabody are rejoicing over the birth of an eight-pound son on Tuesday, May 8. Mr. Perkins, a graduate of the class of 1923, is an instructor at this School.

Announcement was recently of the engagement of Miss Grace E. Smith of Salem, to Harry W. Lear of Danvers. Miss Smith, a graduate of the Salem High and Commercial Schools, is completing a year's course in the homemaking department of this School. Mr. Lear, a graduate of the class of 1927, is operating a successful roadside stand in Danvers.

Scotty Hay, class of '32, is working diligently in North Lincoln on a farm estate. His working days include all days but one each month.

Ellen Collins, of the class of 1933, was this month awarded a scholarship entitling her to one year's course of study at the Designers' Art School, Boston. For the past year she has been studying at the Girls' Boston Trade School.

Since March, Viola Messer, class of 1929, has been teaching Home Economics at the Fairfield Whitney Continuation School in Everett. Miss Messer graduated last June from the State Teachers' College in Framingham.

Parker Ryan, class of '24, visited the School recently.

C. W. A. Results

From a report of the State Civil Works Administration Apple Pest Control Project, it is discovered that 1400 acres of orchards in the state were cleared of brush, undergrowth, and other pest material.

The project cleaned up and protected over 50% of the commercial apple orchards of the State, and about 15% of the smaller orchards.

The numbers of diseased or dead trees cut down in Essex County are as follows:

Cultivated Apples, 7103; Wild Apples, 2682; other fruit trees, 124; Wild Cherries, 39811; all others, 2216; other clean up work, 6,875 Acres.

Radio

Agriculture and home economics will be subjects broadcast over stations WBZ-WBEA five days each week this summer (at 1.00 P. M.). The schedule for the remainder of May is as follows:

May 23—Allen Leland—How Tobacco Farmers are using Their Rented Lands.

May 25—George F. E. Story—Feeding Growing Chickens.

May 26—Horace J. Shute—Ride Your Hobby.

May 28—W. R. Cole—Storage Plans for 1934.

There certainly needs to be a most keen observation in regard to the hardiness of plants and suggestions of ideas for the benefit of plantmen looking toward future severe winters.

Woodchuck Campaign

On Monday, May 28, woodchucks in Essex County will meet the fate which their equally destructive consins, the rodents, did, last year.

In short, a campaign to get rid of burrowing woodchucks, treacherous in fields and orchards, has been planned and will be carried out on the date specified. Calcium cyanide will be used to fumigate the woodchuck burrows and will be distributed at cost to local feed dealers in the county on May 24, 25, and 26.

Anyone interested in the campaign may learn more about it from the County Agent, F. C. Smith, Hathorne.

The list of grain dealers who will distribute the cyanide during the campaign period at less than one half the regular retail price, includes; Amesbury Grain Company; George F. Parker Grain Co., Danvers; D. H. Hodgkins Co., Gloucester; Ellison Coal Company, Harverhill; George Brown, Ipswich; John Shea, 201 Lowell St., Lawrence; Torrance, Vary and Co., 45 Alley St., Lynn; Essex County Co-op. Farming Association, Topsfield; M. W. Ellis, 19 Walnut St., Peabody.

Hog Raisers Elect Officers

Hog raisers of Essex County met on May 9 and elected the following directors for its organization:

Anthony J. Bettencourt, Middleton; Winthrop K. White, Andover; Joseph F. Smith, Lynnfield Center; Thomas L. Robinson, Salem; Joseph Wilkish, Lynn.

The directors elected the following officers:

Joseph Smith, President; Thomas Robinson, Vice-President; G. S. Fitzgerald, Secretary; Harry Partridge, Treasurer.

The allotment committee consists of the President and Messers White and Bettencourt. A budget was adopted, covering the period to July 1, 1934. Contracts are being checked by County Agent F. C. Smith and the allotment committee.

Wool Pooling

Sheep raisers are again offered the opportunity to pool their wool for blanket-making, through the assistance of the State Department of Agriculture.

The plan, which has been successful in previous years, offers Massachusetts farmers a low cost for the manufacture of virgin wool blankets at the pooling center.

Essex County farmers are requested to deliver their wool to Dimon Lockwood, Topsfield, not later than June 16.

For further information write to Mr. C. D. Richardson, wool pool manager, West Brookfield, Mass.

Questions and Answers

The "Farmer and Homemaker" will be glad to answer through a special column, questions which may occur to the reader. Please address your questions to: The Editor, Essex Farmer and Homemaker, Hathorne, Mass.

Here is one sent in last week:

"Dear Editor:

Can you explain the reason why the lower part of my forsythia bushes should have blossomed when the tops were entirely dead this spring?"

Signed, A. F. Danvers"

A. F.

Forsythia plants, like peaches, are tender and easily injured by low temperatures. The below-zero weather of last winter killed forsythia buds, and only those near the ground were saved by being covered, and hence protected, with snow.

The Dairy Situation

H. L. Piper

Dairy farmers of Essex County have some advantages and some disadvantages under the operation of the Federal milk marketing license in Boston. The license has not been in operation long enough to show whether the advantages outweigh the disadvantages or not.

The most substantial and direct advantage of the Federal license is that it has held the Class 1 milk price at approximately 6½ cents when without the license it would have gone down to at least 4½ cents. Holding the price in Boston tends to hold lesser markets at a corresponding level and thus gives an advantage to Essex county dairymen, even if their milk is sold in Lowell, Lawrence, Haverhill or smaller places.

Another substantial advantage is that the Federal License now recognizes the position of the nearby farmer and gives him a preferential rating as compared to up country producers. The up country rating is 61 percent but the nearby Federal rating is now set at 85 percent. Farmers who belong to the NEMPA have received ratings from the association of approximately 90 percent and will be paid on those ratings.

This advantage in rating minimizes the apparent disadvantages of equalization of sales. For instance if the sales of the market total 95 percent of the ratings, then nearby farmers will get paid on the basis of 95 percent of an 85 percent rating (90 percent in the case of association members) instead of on the basis of 95 percent of a 61 percent rating. This is in addition to the advantage which they always have had in lower transportation costs to the market.

The most disturbing disadvantage to Essex County farmers comes from changes in the license which appeared, at first sight, to be advantages; the elimination of the 10 cent weighing and testing charge allowed deal-

Camp Bauer

Another season at Camp Bauer has already started with twenty boys under Mr. James N. Cole of Andover as counsellor. Mr. Cole has served eight years as physical director in the Andover Junior High School and comes here well qualified to direct the recreational activities of the camp boys. A horse shoe tournament has already been run off, with Ray Alley of Lynn winning the watch offered as first prize by the contestants themselves.

Baseball and tennis now hold the center of the stage with everyone in camp taking part and learning to play a fair game.

On rainy evenings the boys gather in the gymnasium for a game of volleyball or basket ball or else in the large recreation room for table tennis and numerous other games recently purchased for the amusement of the boys.

The School, having the welfare of the boys in mind, has completely renovated the dormitory and everything is in readiness for a most enjoyable summer.

The Camp Bauer boys are fortunate in that their days are occupied by wholesome and productive labor while healthful recreation is planned for their leisure time.

G. E. Gifford

Books

"The Farm" by Louis Bromfield, author of "The Green Bay Tree", "Early Autumn", "A Good Woman" and others. Published in 1933 by Harper and Brothers, New York and London.

This novel, chronicling four generations, makes vivid a social history of the middle west between 1815, when the great grandfather, the Colonel, settled in Ohio, and the time when his great grandson, Johnny, departed for the world war. It is the grandfather's lament that integrity and idealism have disappeared from American life and that, to his belief, it has been destroyed by an unscrupulous New England industrialism. Written sincerely and sympathetically, "The Farm" will appeal to all people interested in the evolution of agriculture.

Project Note

Mary Peterson, of the homemaking department, was released on May 21, to fill a position as household assistant in a private home in Newtonville.

This looked like a gain of 10 cents a hundred for the farmers but, in practice, it is working out that dealers can buy milk up country at the same price with the weighing and testing service already performed. This has led to a pronounced trend of dealers to buy up country milk instead of nearby milk.

Nutritive, Delectable Desserts

To stress the importance of milk, eggs, and fruit in the diet of children is one thing; to impress the child with the value in this grim fact is another.

Why not be wise, and make the following delectable desserts which not only the children will like, but the whole family as well:

Golden Fruit

1 grapefruit
2 oranges
2-3 tablespoons sugar
2 cups apricots (with juice)
Section grapefruit and cut into fairly large pieces. Section or slice oranges. Let stand a few minutes with sugar. Add apricots, canned or stewed. Let stand a few minutes or an hour to blend flavors.

Lemon Cream Rice

1-4 cup rice
3 cups milk
1-2 cup sugar
2 egg yolks
2 egg whites
Grated rind of 3-4 lemon
1 1-3 tablespoons lemon juice
2 tablespoons sugar
3-4 teaspoon salt
1-4 teaspoon lemon extract

Cream rice with cold water, let soak over night. Strain, put in double boiler, add milk and cook until rice is soft, add sugar, lemon rind, juice, salt and egg yolks slightly beaten. Cook until mixture thickens, turn into a buttered baking dish and cool. Make meringue by beating whites and sugar and lemon extract. Cover top of pudding with meringue and brown in moderate oven.

Yum Yum Pudding

1 egg well beaten
3-4 cup brown sugar
1-4 cup molasses
1 cup rolled oats
1-2 teaspoon cinnamon
1-2 teaspoon salt
1 quart milk
3 medium-sized apples

Slice apples into buttered baking dish, mixing 1-4 cup of sugar with them as they are being sliced. Mix remainder of sugar with other ingredients and pour over apples. Bake one hour in slow oven. Serve with top milk or thin cream. Two cups of stewed pitted prunes may be used in place of apples. Use only 1-2 cup sugar with prunes.

Winter-Injured Shrubs

For those whose shrubs have been winter injured, it is advisable that they first determine the extent of the injury, then prune and care for them accordingly.

Cone-bearing evergreens which still look as though they were hit by the cold weather may outgrow their brown edges in a few weeks. All brown tops or dead wood should be immediately removed.

Better Homes Day

Each year in June, women interested in the work carried on by the Essex County Extension Services are invited to attend Better Homes Day. This year, on Tuesday, June 12th, these women will again be welcomed. The morning program will start at 10 o'clock to be followed by picnic lunches on the campus and an afternoon of entertainment.

Mrs. Charles Sewall of the American Farm Bureau Federation has been secured for the afternoon speaker.

Films of Yellowstone Park and the Chicago Exposition promise to be of added interest.

Exhibits, showing the type of work done during the past year will include nutrition, clothing, and furniture renovation.

All mothers are invited to bring their children who will be cared for and entertained by girls in the home-making department of the School.

The morning speaker will be announced at a later date.

Mrs. McIntire, Home Demonstration Agent, anticipates a large attendance.

Remember the date: Tuesday, June 12, at the Agricultural School.

TOPICS OF THE TIMES

(Continued from page 1, col 1)
is going a little bit too far in restricting output. But there are some things, of course, Alice, in which we can never have overproduction."

Bill the Lizard began to jump up and down. "I know," he said, "I know! Money."

"And so," said the White Queen, "what a lot of people are doing, is to look around and see if there are any countries where the people do not suffer from abundance, but are short of food and clothes and other necessities. Then we must find out the secret of how they have managed it and we must imitate them."

"Nothing venture, nothing lose, you know," said Bill.

(Excerpts from the New York Times May 13, 1934.)

Rhododendrons will need an unusual amount of moisture.

Privet hedges, if they have shown no signs of growing, are probably dead and should be cut back to the ground. This applies to other shrubs and hedges whose tops have been killed. If they are pruned way back the half-dead tops will not draw heavily on the food supply of the plant. From shrubs which have not been severely injured it will be wise to cut the young wood to allow the plant to restore the balance of leaf and flower.

Plenty of moisture will help the injured shrub recover. A peat moss mulch or last year's undiseased leaves which fell off will conserve moisture.

Uninjured shrubs should have application of fertilizer high in nitrogen. Injured plants should wait until next year for fertilizer when the tops and roots are back in balance.

Why Bordeaux Mixture is Used On Grape Vines

An interesting and true story underlies the use of Bordeaux mixture for control of grape vine disease, as related by A. M. Davis at a recent lecture on garden maintenance.

Formerly, in the French town of Bordeaux, vineyards were the delight of small boys, and small boys were becoming menaces to grape growers. The vines nearest the streets were suffering great losses. As is the case with most losers, a scheme was sought whereby the losses should decrease, through a sad lesson. A weak solution of bichloride of mercury was sprayed on the vines nearest the streets, turning the grapes greenish in color, resulting in many awful stomach aches.

This led to the use of Bordeaux mixture for the same purpose and it happened one summer that all vineyards were attacked by a bacterial disease and those vines near the street were the sole surviving vines in the vineyard.

4-H Handicraft Awards

Fred Riggs, Jr., of Essex, was sweepstake winner at the second annual handicraft contest held on April 21st.

For his outstanding work in each of the four classes in the contest this 4-H club worker, in addition to winning ribbons and prizes, was awarded a free trip to the 4-H camp which will start its 4th season on June 23rd.

The second prize winner was Roger Merrithew of Saugus; third, David Means of Essex; and fourth, Thomas Hayes, North Andover.

Judging prizes were awarded to Frank Hardy of Essex, Fred Riggs and Roger Merrithew.

High scorers in handicraft questions in Class A were: first, Fred Riggs; second, David Means, and third, Roger Merrithew; in Class B: first, Edgar Haynes, second, Raymond Hanson, and third, William Larkin, all of Saugus.

Twenty-four boys who have been carrying on outstanding handicraft projects in the county entered the contest, under the direction of County Club Agent, Horace J. Shute. The work exhibited by each showed ingenuity and skill.

REPRINTED FROM THE SALEM EVENING NEWS

If you haven't *Lychnis viscaria splendens* (rose-pink campion) in your rock garden you should by all means plant it this year and enjoy its mass of bright rose-pink flowers in June and July. It is a dwarf growing plant, 12 to 18 inches high, of tufted habit. There is both a single and double flowering form, the latter being fine for cutting.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 15

HATHORNE, MASS., JUNE 1934

NO. 6

New Shrubs

Three new and outstanding shrubs given to us through the explorations of the late Professor E. H. Wilson of the Arboretum have flowered again on the School grounds this year. Coming from the higher altitudes of Eastern Asia they have proved their worth by their extreme hardiness. Home owners and others desiring worthwhile new plant material can afford to give them close attention.

Fragrant viburnum (*Viburnum Carlesii*) is a striking member of its family. It proves to be extremely hardy and flowers in early May with an abundance of clusters of pinkish white flowers, closely resembling in odor and somewhat in appearance the mayflower. The fragrance is very choice. Shrubs now four years old have reached a height of three feet and make a very uniformly beautiful spreading plant.

The beauty bush (*Kolkwitzia amabilis*) is another beautiful member of this group. The bushes in our plantation have already attained a height of seven feet and were covered this year with very large sprays of medium sized pale pink flowers. The flowers are small, rather fragrant, and bloom continually and in abundance. The flowering season is from May 30 until June 18, a rather long flowering period. The bush is very ornamental in foliage and the shape is very attractive.

Korean spirea (*Spiraea trichocarpa*) is the latest of the common type of bushy spirea. It follows bridal wreath and does not grow quite so tall. It is, however, even more attractive in spray and blossom cluster, being more abundant, having longer racemes, and carrying a generally more profuse mass of bloom. This spirea is in flower from June 1 to 18, which is a long flowering period.

These three varieties are now becoming generally available from nurseries.

Farmerette Carrying Garden Projects

Miss Ruth Fairweather of 104 Summer St., Andover, a junior student in the Essex County Agricultural School, finds part time employment at the Livingston greenhouses. In addition she is carrying on a combination flower and vegetable garden at her home and has set out 2000 gladiolus bulbs. Many of her products are sold to her neighbors in Andover.

A. V. A. Life Membership Presented To Robert O. Small

The presentation of a life membership in the American Vocational Association to State Director Robert O. Small by the members of the Massachusetts Vocational Association brought to a climax the association's first convention.

"It was a tribute to the man whose genius and leadership have placed Massachusetts in the front, vocationally—more than that, it was an expression of the respect and esteem



Robert O. Small

which vocational teachers have for him and an appreciation of his enduring service on their behalf."

Under his guidance, vocational education in Massachusetts has developed from a little-known experiment to a well-established branch of the educational system. This School is glad to be a part of that system, and take guidance from this strong friend and teacher.

Questions and Answers

Question: "Is the country facing a food shortage as a result of drought areas?"

Answer: "After thorough study the experts of the Bureau of Agricultural Economics have concluded that the drought has not endangered the food supply of the United States. The present carry-over of products will give ample supplies for the coming year.

The Lewis Family At Sunnyridge

That a New England farm of 11 acres tillage, 55 acres woodland and 20 acres grass and tillage rented, can and does maintain a large family even in these troublesome times is well illustrated by the Lewis family who owns and operates "Sunny Ridge" farm on Lowell Street, Andover. Mr. Herbert Lewis, father of nine children, four boys and five girls, was once caretaker of the General Israel Putnam estate in Danvers, a part of which is now leased for market garden purposes by the Essex County Agricultural School. This fact is interesting because three sons, Robert, Roger, and Walter have since returned to the same spot to learn gardening on the same plot of land, as students in the agricultural department of this School. Two daughters, Helen and Dorothy, have attended the Home-making Dept. of the School which is further evidence that the Lewis family believes in vocational training.

Some twenty years ago, Mr. Lewis acquired a 15 acre farm in Andover which has come to be known as Sunny Ridge. Here the nine children have grown up. Arthur, the oldest, although established in the laundry business in Andover, helps in marketing poultry products. It was intended that Arthur should go to college but the war changed all that and he enlisted in the air service and became an instructor in aviation with the rank of second lieutenant. He is married and has three children. A sister, Dorothy, a graduate of Punchard High School, has just completed a year in the homemaking department of the agricultural school and will graduate in November, making the fifth child of the Lewis family to graduate from the Essex County Agricultural School. The others are: Helen, class of 1922; Robert, class of 1925; Roger, class of 1925; and Walter, class of 1933. Robert has been associated with the national Davey Tree Expert Organization for the past eight years and is now district manager of the Syracuse, New York, district. Walter has just completed his sophomore year of the regular course at Massachusetts State College, while Roger is doing his part in operating the home farm.

Three other daughters, Mrs. E. Carleton White of Norwood, Mrs. Alfred A. Kneath of Andover, and Mrs. Elbery E. Metcalf of Saugus are all trained nurses, having graduated from the Nurses Training School of the Massachusetts Homeopathic Hospital

(Continued on page 4, col. 1)

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Officers of County Organizations

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Essex County Rabbit Breeders' Association

President, D. R. Pinkham Lynn
Secretary, Helen Wales Beverly
Treasurer, Ned Harris Ipswich

Northern Essex Beekeepers' Society

President, Thomas Smith Methuen
Secretary, Stephen Dyer Lawrence

Eastern Massachusetts Society of Beekeepers

President, George A. Meigs Hathorne
Secretary, Frank H. Coville North Andover

E. C. A. S. INSTRUCTOR ELECTED TO M. V. A. EXECUTIVE COM.

Among the officers elected for the 1934-1935 Massachusetts Vocational Association, C. M. Wood, an instructor at this School was chosen to serve on the executive committee.

Special Tours to Chicago and Far West For Farmers

Calling the attention of farmers to two western tours: one to the far west, another to the Chicago Exposition; the former leaving August 18th and the latter, July 14.

These tours are sponsored by the Massachusetts Farm Bureau Federation and may be enjoyed in comfort and even luxury at a minimum cost.

For information concerning details of the tours write to Mr. Nelson M. Jost, Massachusetts Farm Bureau Federation, 131 Lexington St., Waltham.

The far west tour will include a twelve-day trip through Niagara Falls, Chicago, Denver, Colorado Springs, Salt Lake City, Yellowstone with the Grand Canyon, and Detroit, including stops in other cities on the way.

The Chicago tour is done in six days with stops at Niagara Falls, and on the return trip there will be a boat excursion from Detroit to Buffalo.

Will Your Bees Be Ready For the 1935 Season

C. R. Kellogg, M. S. C.

It may seem premature, just in the midst of our early summer honey-flow, to begin talking about bees for 1935, but it really is not a bit too early to start planning for the coming year. There is little, beyond the control of swarming, that can now be done for the bees that are at present busy on the summer's honey-flow. But during the summer and fall, much can be done towards preparing for a better season next year. By taking August 1 as our Beekeepers' New Year and making it the starting point for the season of 1935 much can be done to assure us of larger and stronger colonies for work next spring. But if we wait until next spring it will be too late to accomplish much toward increasing the effectiveness of our bees.

In all parts of the state there are undoubtedly many colonies of bees which, due to neglect and carelessness, are not producing much, if any honey, but which, if given a little additional care and attention would build up into strong and efficient colonies for the 1935 season. Not only are these poor colonies a direct loss to their owners, but at the same time they are a distinct liability to all neighboring apiaries because they may become centers of infection that may spread foulbrood to more careful neighbors. All who have such colonies are urged to give them the extra care needed to make them assets instead of liabilities.

In order to have our colonies strong in the spring, when big colonies are worth the most, certain definite conditions must be met and fulfilled by the beekeepers. These conditions are:

1. A young queen in the colony near the first week of August.
2. 25,000 or 30,000 young bees with which to begin the winter.
3. Sufficient food or high quality to carry the colony through the winter and early spring.
4. Room for the bees to cluster during the fall and winter.
5. Room for early spring brood rearing.
6. Protection against winter winds.
7. Protection against low temperatures.
8. Protection against excess moisture.

Editor's note.

In later issues of this publication the foregoing topics will be discussed.

All who are interested in joining in the campaign for rehabilitating neglected colonies of bees are asked to send their names to the County Agent, F. C. Smith, Hathorne. Literature will be sent them from time to time. Daily radio programs of the State College will also include timely information on beekeeping.

(Continued on page 4, col 3)

Calendar

June 22—Homemaking department closes for summer holidays.

June 22-29—4-H Club Camp at Boxford, Baldpate Pond.

July 22 through 28—Farm and Home Week, Amherst.

Homemaking Department Notes

The recent annual election of the students' home economics association resulted in the following officers for the coming year: President: Elsie Hamilton, Saugus; Secretary, Betty Johnson, Salem; Treasurer, Freda Peterson, Newbury.

Mrs. Eva Whiting White, of the Women's Industrial Union, was guest speaker at the annual Parents' Day held June 20th.

The homemaking department closes Friday, June 22, for the summer vacation. Many of the girls have accepted positions in private homes as household assistants, and in tea rooms. Others plan to undertake ownership projects, canning, cooking, sewing or assuming the care of younger children.

Winners in a spelling match held in the homemaking school recently, were: Helen Ehrlich, Methuen; Dorothy Thorn, Saugus; and Dorothy

Alumni Notes

A daughter was born to Mrs. Harold Yeaton (formerly Mary Scarlett, class of 1925) early in June. Mrs. Yeaton is now living at 34 Lake Avenue, Lynn.

Roland Wagner of Haverhill, a graduate of the class of 1932, is engaged in a home dairy enterprise. Wagner specialized in dairying while at the School and has built up a small sized tested herd of Guernseys, Ayrshires, and Holsteins. He finds a retail market for his products in Lawrence and vicinity.

Clifford Bryer, class of 1930, maintains an eleven acre vegetable garden in Newton, New Hampshire, has been doing landscape gardening in and around Boston, and is studying art evenings, once a week.

Football

The Essex Aggie fall football schedule is complete but for three dates:

- October 5—Malden
- October 11—Wentworth
- October 20—Open
- October 26—Keith Academy
- November 3—Open
- November 9—Angel Guardians
- November 17—At Stockbridge
- November 24—Open

FARM AND HOME WEEK
JULY 22 — 28

Control Calendar For Vegetable Pests

Asparagus

Pests: Common Asparagus Beetle; 12-Spotted Asparagus Beetle. Control Measures: On cutting beds, spray with non-poisonous pyrethrum sprays according to directions on package. Allow border rows to feather out as traps and treat them as below. After cutting season and on all other beds, spray with lead arsenate 1-50 and calcium caseinate 1/2-50, or dust with lead arsenate-lime 2-80 when insects appear. Dust when plants are wet.

Beans

Pest: Mexican Bean Beetle. Control Measure: Plow under or burn infested vines immediately after crop is harvested. Spray or dust vines about June 15 and again about August 1, repeating when necessary. Spray — magnesium arsenate 1 1/2 pounds in 50 gallons of water. Dust —magnesium arsenate 1 part and hydrated lime 5 parts, or barium fluosilicate 1 part and hydrated lime 5 parts. Do not use lead arsenate which injures bean foliage. On pods within ten days of harvest use a non-poisonous pyrethrum soap spray according to directions on package. Be sure to cover under side of leaves with all treatments.

Potato

Pests: (1) Flea Beetle; (2) Colorado Potato Beetle; (3) Late Blight; (4) Early Blight. Control: (1) Spray with 2 pounds of calcium arsenate or lead arsenate in 5-5-50 Bordeaux, or dust as for Blister Beetles; (2) Early plowing and frequent cultivation reduce infestation. In spring, trap baits of potato attract many wireworms which may be killed by hand or by soil fumigation with calcium cyanide; (3) Use certified seed and select sound seed tubers. Apply Bordeaux 5-5-50 or copper-lime dust 20-80 early in July and keep vines covered to the end of the season. Ridge rows well after last cultivation. Store in dry, cool place. (4) Same as for Flea Beetle. Apply when plants are 8 inches high. Control insects.

Peas

Pest: Dry Root Rot. Control: Use clean seed if possible; otherwise, treat seed with organic mercury dust 3 ounces to 1 bushel of seed. Practice field sanitation and 5 year rotation and avoid heavy or poorly drained land.

Sweet Corn

Pest: (1) Smut; (2) Wilt or Stewart's Disease. Control (1) Examine plants 3 times in July and August and remove boils with knife before they burst. Practice field sanitation. (2) Practice 4 year rotation and sanitation. Disease-free seed very important. Dip seed in corrosive sublimate solution, 8 tablets in 1 gallon of water or 1 ounce to 7 1/2 gallons of water, for 10 minutes and rinse in fresh water; dry or plant at once. Do not work in corn field when plants are wet.

(Continued on page 4, col. 3)

Bulletins

A new edition of a popular bulletin of the Massachusetts State College has just been issued by the extension service. It is Leaflet Number 35, Culling and Selecting Pullets and Hens. The publication has been completely revised by the author, Professor Luther Banta. New illustrations and discussions make it a valuable leaflet for the poultryman who wants to eliminate low producing birds from his flock.

One of the most popular publications of the Massachusetts State College this spring has been one dealing with vegetable gardening. It is Leaflet 59, The Home Garden.

These publications are available free of charge at the Extension Service, Massachusetts State College, Amherst.

All-Mash Feeding

VS.

Mash and Scratch

The comparatively recent use of an all-mash ration for layers has been of considerable interest to poultrymen, but up to this time there has not been a great deal of information available in regard to its merits in comparison with mash and scratch feeding. An effort is being made through the Home Egg-Laying Contest in Connecticut, however, to get some information along this line. This contest embraces 147 flocks involving approximately 75,000 layers, and includes backyard, farm, and commercial flocks. These flocks report under three types of feeding: (1) mash in hoppers, grain in litter; (2) mash in hoppers, grain in hoppers; (3) all-mash, no other feed. Beginning last fall, the flocks using the different types of feeding have reported the monthly production, culling and mortality.

For the six months ending with March, the average number of eggs per bird was as follows: (1) 78.14 eggs per bird; (2) 75.45 eggs per bird; (3) 62.71 eggs per bird.

These figures show a production of 1 1/4 to 1 1/2 dozen eggs per bird in favor of the birds fed a combination of mash and scratch over those fed all-mash only.

Of equal interest is the report regarding the percentage of culling and mortality under the feeding methods previously outlined. It follows:

Feeding method	1	2	3
No. Birds	40,206	22,079	8,360
Flock Decrease	26.83	27.88	29.26
No. Culled	17.43	19.26	19.13
Prolapsus and Cannibalism	2.96	3.19	3.96
Mortality from other causes	7.67	5.86	6.66

It will be noted that the losses and culls are not greatly variable under the three feeding methods, but the results favor the mash and scratch fed birds slightly.

J. Stanley Bennett

Farm and Home Week

Plans for the Massachusetts Farm and Home Week at the Massachusetts State College are nearing completion. Special features for the four days, July 24 to 27, have been arranged and 14 subject matter groups, the same as in previous years, are planning programs, according to an announcement made this week by Willard A. Munson, director of the extension service.

On Tuesday evening, July 24, the opening day, there will be three one-act plays, finalists in the amateur play writing contest sponsored by the extension service. The Lotus Quartet of Boston will entertain Wednesday evening, and Wednesday afternoon James H. Powers, editorial writer and foreign editor of the Boston Globe will speak. The log chopping contest which has proved a popular feature each year will be held at Vineland.

The subject matter meetings include homemaking, forestry, fruit growing, lawns, tobacco and onions, food preservation, farm management, vegetable production, home flower garden, home vegetable garden, dairy, poultry, and beekeeping.

Complete programs will be available after July 5th, by writing the mailing room, M. S. C., Amherst.

MORSE SCIENCE

CLUB OFFICERS

Harold Stevens, an instructor at this School, was recently re-elected President of the Morse Science Club, Salem, Mass. Alton G. Perkins, also an instructor here, was re-elected Corresponding Secretary of the club.

Production Credit Loans To 4-H Members and Future Farmers

As stated by Mr. J. F. Harriott, vice president of the Production Credit Corporation of Springfield, the Production Credit Associations are authorized to make loans to finance projects of 4-H clubs, Future Farmer Clubs, and vocational agriculture students. This means that members of calf clubs, poultry clubs, potato clubs, and the like may, through their sponsors, get some very practical experience in short-term agriculture credit. This seems to be an excellent opportunity to help develop in the younger generation a realization of what it means to conduct farming operations on a cash basis and to meet obligations promptly.

George C. Upton, Central St., Lowell, Secretary-Treasurer of the Production Credit Association serving the territory including Essex County, will be glad to furnish details of how club members may make use of the Association.

Milk Used In Tasty Hot Weather Drinks

Cold drinks for hot weather are in order, and Professor J. H. Frandsen of the dairy industries department of the Massachusetts State College suggests that they can well be made of milk. Ice cold milk can be flavored with chocolate, strawberry juice, or orange juice to make delicious drinks.

Cherries will soon be ripe, and they may be added to milk, with a little lemon juice. This drink is known as cherry milkade. Something a little out of the ordinary in the way of a hot weather drink is made from well-ripened, mashed bananas added to milk, and flavored with honey.

Lemolac, tasty combination of lemon juice and buttermilk, is popular with many people, while others prefer ice cold buttermilk to all other

Directions for making these drinks, as well as for ice cream and sherbet of several kinds, may be obtained without cost from the dairy department of the Massachusetts State College, Amherst, Massachusetts.

Essex County 4-H Winners In State Event

Mildred Hills of Byfield has been awarded a trip to the 4-H club Camp Gilbert at Amherst for excellence shown in food preparation. She won first prize in the state baking powder biscuit contest held recently at Framingham. Dena Bulgaris, also of Byfield, won second prize, and Jane Kessariss of Beverly was awarded second prize in the school dress contest.

THE LEWIS FAMILY

(Continued from 1, col. 3)

in Boston. Mrs. Metcalf is the wife of an instructor at the Aggie School.

Unlike many another farm, with the family grown, the farm business has not decreased, for through the years the elder Lewis has always been on the alert to follow improved practices and has cultivated a knack in letting the boys take charge of some of the farm enterprises. In the last few years one son, Roger, has specialized in strawberries, potatoes and sweet corn, all of which find a ready market at the Sunny Ridge wayside stand. The usual attendant at this stand is Mrs. Herbert Lewis mother of the nine children, alert and active in every problem concerning the farm or the family. With understanding and foresight, Mr. and Mrs. Lewis have made the farm support the family, and now have a business worth more today than at any previous time. This family demonstrates very well, I think, that farming should be a way of living and not a business apart from family life.

George E. Gifford

Better Homes Day Well Attended

One hundred and fifty friends of the School and Extension Department enjoyed the tenth annual Better Homes Day, held in the interest of acquainting Essex County residents with the work carried on by the Home Demonstration Agent, Mrs. Mary M. McIntire and her assistants.

Following morning reports, moving pictures of the Chicago Exposition and the far west were shown by a member of the American Farm Bureau Federation.

Mrs. Marion Rudkin of Beverly was the guest speaker of the morning. She based her talk, The Ministry of Laughter, on the words of Marcus Aurelius: "Happiness depends upon the quality of our thoughts."

A picnic lunch was followed by songs under the leadership of Horace J. Shute, County Club Agent.

The meeting was brought to a close by the guest speaker of the afternoon, Mrs. Charles W. Sewall of Indiana, a member of the Farm Bureau Federation. Her subject acquainted farm women with their places in the present crisis.

Conserve Wild Plants In Natural Setting

At the beginning of the vacation period we do not want to forget to keep well watered, plants, shrubs, and trees that have been transplanted from the wild. They do not have as fibrous a root system as nursery-grown stock which has been transplanted several times and therefore require continued attention throughout the summer.

Trees and shrubs dug up during the summer from the wild while in leaf, receive such a shock to their systems it is doubtful that they will live on. It is generally better to leave them in the wild to be enjoyed by everyone.

G. A. Meigs

More than thirteen times as much money was loaned on farm mortgages in Massachusetts through the Federal Loan Bank during the first five months of 1934 as during the same period of 1933, according to a report by E. H. Thomson, general agent of the Farm Credit Administration of Springfield, (Mass.) which serves the six New England states, New York, and New Jersey.

Sour Cream Dressing

1 teaspoon salt
3 tablespoons vinegar
1-4 teaspoon mustard
1 cup evaporated milk

Mix salt, vinegar and mustard. Stir slowly into milk. Serve on cucumbers, with finely minced parsley.

Mrs. Roundy Speaker At Round Table Conference

Habit formations, diet, and behavior were the subjects recently discussed by Mrs. Mary Roundy, R. N., at a Round Table Conference of mothers, sponsored by Mrs. Helen Wood Almeida, supervisor of public health in Lynn.

According to Mrs. Roundy there are certain habit formations in the diets of children, which, if developed at an early age, will prevent physical defects. Wholesome food served three times a day is recommended, with the denial of food in between meals.

It is a well-known fact that parent behavior influences child behavior. The consideration which a parent may show in sharing her home with her children's companions will not go unrewarded. The children, instilled with the spirit of their parent's friendliness will in turn be of happy dispositions and will at the same time be under the parent's guidance.

Cyanogas Gas For Woodchucks and Ants

Although 4000 woodchucks were destroyed in the recent Essex County woodchuck campaign, only persistent application of the destroyer will keep them eliminated.

None but inhabited burrows need to be treated. Cyanogas, in crystal form, will create a deadly gas when brought in contact with the ground. Use it when the sun shines, never on a rainy day. All entrances to a woodchuck's den should be poisoned with a tablespoon of cyanogas powder pushed into the burrow an arm's length. The opening should then be covered with a sod turned upside down.

Ants

The same material is now put out in liquid solution in a small can. The can may be inserted into ant hills to produce its deadly results to ants.

Control Calendar For Vegetable Pests

(Continued from page 3, col. 1)

Tomato

Pests: (1) Flea Beetle; (2) Late Blight and Fruit Rot. Control: (1) Same as for potato flea beetle. (2) Apply copper-lime dust 20-80 or preferably Bordeaux mixture 5-5-50, beginning the first week in August and continuing at 10 day intervals until mid-September. Do not rotate with potatoes, eggplant, or pepper. Practice field sanitation.

E. F. Guba and W. D. Whitcomb,
Waltham Field Station

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 15

HATHORNE, MASS., JULY 1934

NO. 7

"Grow Your Own Pansies"

Harold C. Stevens

Probably no group of spring bedding plants is more popular than pansies, and there are few home gardens that do not have a small bed or border of them, it may be only a dozen plants, holding up their bright and cheery faces, and proclaiming to the world that "spring is here".

In spite of the fact that they are so universally grown and admired, very few home gardeners raise their own pansies from seed, although the process is a simple and inexpensive one. For the price one would pay for two dozen plants from the growers in the spring, one can purchase seed enough which will, with fair success, produce two or three hundred plants.

Pansy seed should be sown anytime between the middle of July and the tenth of August, the very best time for sowing in this locality being probably the last week in July. The seed should be sown in cold frames, or in some cool, airy part of the garden, in soil that is a good fibrous loam, well drained, but still not sandy. If the soil is not of spongy, but firm texture, indicating a lack of humus, dig into it a generous quantity of well decayed barnyard manure, or, if the manure is not obtainable, finely ground peat moss. The seed bed soil should be well-prepared, finely pulverized to a depth of six inches, raked and smoothed, previous to the seed sowing. The seed should be sown broadcast, pressed lightly into the soil with a wide flat board, and barely covered with a thin layer of sifted loam. After giving it a thorough watering, the seed bed should then be covered with pieces of burlap, cotton or muslin cloth, or even newspapers, until the seed germinates, which is usually in a week or ten days. This covering of the seed bed is important, as it prevents a rapid drying out of the soil during the germinating period, and keeps it cool and moist. As soon as the seed begins to sprout, and the tiny seedlings appear, the covering should be removed permanently. The seedlings should be kept well supplied with water at all times during their growth. By the last of September the young plants should be large enough to be transplanted. They can be wintered over in a coldframe, or planted in raised beds of well-enriched loam in a well drained part of the garden. Set the plants five or six inches apart each way. After the ground freezes the pansies should receive some protection for the winter. Rye straw, salt

(Continued on page 2, col. 2)

Sixteenth Annual Farm and Home Week

On Tuesday, July 24, the first of a series of meetings, banquets, and entertainments will start off the 16th annual Farm and Home Week at the Massachusetts State College, Amherst. Tuesday's features will include the Women's Advisory Council dinner, fruit growers' dinner, tour of Amherst gardens and one act plays in the evening.

Wednesday's primary events will include the meeting of the Parent Teacher Association, an experimental demonstration in physics, a general assembly at which James H. Powers,



Memorial Hall — M. S. C.

editorial writer for the Boston Globe, will discuss the subject Bad Neighbors in Europe; the homemakers' tea, log chopping contest, and the Lotus Male Quartet of Boston.

On Thursday a demonstration apparatus for measuring the human mind will be in operation, there will be a livestock parade, while in the evening, poultrymen's and homemakers' dinners will precede a special Camp Gilbert program.

Friday will be devoted to seedsmen, poultrymen, and beekeepers.

In addition to the features listed above, the daily programs will be filled with meetings and lectures on the subjects of fruit growing, care of the lawn, cash crops and forestry, (Tuesday); fruit growing and dairy, (Wednesday); dairy, commercial vegetable production, and poultry, (Thursday); and seeds, poultry, and beekeeping, (Friday).

Raspberries at Essex Aggie

A very definite effort is being made to test new varieties of raspberries in our rather extensive fruit testing area. Raspberry culture seems to be revolving about the problem of securing disease-resistant varieties. Raspberry mosaic and some other diseases have played havoc with most of the home garden plants, and many of the commercial plantations.

Viking. This variety originated at the Canadian station at Vineland. It has fruited very heavily and satisfactorily at the School for the past two years. The variety makes wonderful cane growth, sturdy, able to carry a heavy crop of fruit. The fruit is large, compact, of an attractive red, cells of fruit small, and quality the best. It ranks fully up to the old variety Cuthbert in quality. The plant appears to be hardy, shows some susceptibility to mosaic and will need to be "rogued" severely.

Newburgh. This variety originated at the New York State Agricultural Experiment Station and has again proved to be a most interesting variety. The fruits are very large. By actual measure individual fruits measured an inch and one-eighth broad by an inch long. The berry cells are large, color of fruit a beautiful red, and quality second only to Viking. Thus far this variety seems to be remarkably free from disease and very hardy.

Newman. This variety has been under test longer than the preceding varieties and in many ways has pleased us very well. Last year it out-yielded Newburgh. This year Newburgh is heavily out-yielding Newman. In quality it ranks well with Newburgh. It has a smaller, bright red fruit. In cane it seems to be very hardy. Only these three varieties are mentioned because they are outstandingly better than the older existing sorts.

The good qualities of Latham, namely, hardiness and yield, should not be over-looked, but when its low quality and its susceptibility to mosaic are considered perhaps the careful, conscientious grower had better look to other varieties.

The first consideration in granting credit to a man should be the man himself. And, in him, foremost is character. Next is ability. Even though a man is honest he may not be able to get ahead. Good character needs with it experience and horse sense.

E. H. Thompson

Essex Farmer and Homemaker

HATHORNE, MASS.

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Calendar

July 14-28—Camp Gilbert—a 4-H Leaders' Training Camp at Amherst.

July 23-27—Annual Conference of Agricultural Teachers of Mass., at Mass. State College.

July 24-27—Farm and Home Week, M. S. C., Amherst.

August 1—Sixteenth Annual Market Gardeners' Field Day, Cedar Hill, Waltham.

Alumni Notes

C. A. Laughton, class of 1929, who has recently been married is now living in North Chelmsford, where, in his spare time he is developing a successful perennials nursery.

Mrs. Edward Canty (formerly Madeline Walker) of the class of '24, visited the School on Better Homes Day. Mrs. Canty has two children, aged 3½ and 2, and is now living at 4 Elm St., Beverly.

Stanley Tweedy, a former student, recently called at the School.

Viola Messer, class of 1929, is at present working at the Lookout Hotel, Ogunquit, Maine. In the fall Miss Messer will go to Worcester where she has accepted a position to teach related sciences at the Trade School.

Mr. and Mrs. Robert Lewis of Syracuse, N. Y., visited the home of Mr. Lewis (class of '25) in Andover, July 4th.

Apple Crop Survey

ESSEX COUNTY

A recent survey of the probable apple yield this year shows a decrease of 64% under the set of 1933.

Eighty-seven per cent of the yield in 1933 was marketed in field crates, a significant average.

Judging from reports sent in to the county agent, this year's estimated yield as compared with the yield of 1933 is denoted in the following groups: Baldwins, 23.3%; McIntosh, 50.7%; Gravenstein, 34.5%; Greening, 42.0%; Wealthy, 60.4%; Delicious, 34.6%; Northern Spy, 21.0%; Wagoner, 35%; all others, 26.0%.

The low percentages are results of the severe winter weather.

Fairs Dates

The Eastern States Exposition has sent out its 1934 prize list for cattle, sheep and horses.

Dates for some of the fairs are as follows:

Topsfield—September 5, 6, 7.

Brocton—September 9-15.

Springfield—September 16-22.

Fairs committees feel that this year's season, with various new features, is looking well upward.

"GROW YOUR OWN PANSIES"

(Continued from page 1)

marsh hay, or evergreen boughs may be used. In late March, or as soon as the danger from alternate thawing and freezing is over, the protective winter covering can be removed.

Several strains of giant flowering pansies are on the market, most of which are of good quality, and will produce large flowers in a variety of colors. The new Swiss Giants are a most beautiful strain containing many unusual shades and color combinations. The two varieties Alpenglow and Lake of Thun (also called Ulls-water Blue) are, among the newer and better pansies, outstanding. Probably no variety has met with such universal favor as has Lake of Thun. Its rich blue color attracts instant attention wherever grown, and it should be included in the select list of varieties. Another distinctive variety is Mrs. Pierre S. DuPont, which is a rich golden apricot color, similar to the popular Apricot Queen viola. St. Knud is another excellent orange apricot colored variety, and the seed is less expensive than Mrs. DuPont. The Giant Trimardeau strain furnishes some of the best pansies in named varieties of separate colors. Snow Queen, a pure white, Golden Queen, rich pure yellow, and King of the Blacks, a velvety black, are three of the best in this group. One thing should be borne in mind if one hopes to grow large flowered pansies the equal of those which are grown by specialists, and that is to purchase the best and more expensive seed. Giant flowers cannot be expected from cheap or inferior seed.

News of the School At a Glance

Under the supervision of Miss Sarah E. Carleton, recently-appointed librarian of the School, the text and library books have been re-catalogued, re-lettered and re-arranged.

The filing of bulletins, of which the School receives many, will be re-organized in the fall.

The School grounds are a study in greens while the fruit nursery is less conservative, flourishing red and yellow delicacies.

The boys living at Camp Bauer, a dormitory on the grounds for student employees, have for their camp counselor Mr. James Cole of Andover, whose experience in athletic activities enables him to organize beneficial programs outside of working hours.

On July 6, Professors Bourne and Whitcomb of the Massachusetts State College and Waltham Field Station, visited the School nursery and liberated three hundred parasites for the control of oriental peach moth.

New Apples

The United States Department of Agriculture has been making a concerted effort to replace Yellow Transparent with apples of better quality and better color. Apparently they are succeeding in doing so. There are several varieties now fruiting for the second time in the School testing ground which seem to show considerable merit. They are beautiful red apples, in many cases rather elongated. The quality appears to be good enough to eat from the hand, and if they possess correspondingly good cooking qualities they should be a real asset. We know that fruit of edible quality was available on July 14, and in this respect they even outrank Yellow Transparent as regards earliness.

Holstein-Friesian Outing Aug. 11

The annual summer meeting of the New England Holstein Friesian Association will this year occur on Saturday, August 11, at the home of Anthony W. Ackerman, Osgood St., No. Andover.

Congressman James W. Strong of Kansas, a breeder of Holsteins, and active in farm legislation, is to be the guest speaker.

A splendid opportunity will be afforded all farmers attending to see the noted Holstein herd of Mr. Ackerman.

An invitation is extended by him to any Essex County farmers desiring to participate in this outing. Basket lunches may be eaten on the grounds. Coffee and ice cream will be served.

Young Queen in Hive in Late Summer Important

It is a known fact to beekeepers that a new and vigorous young queen should be in the colony before the beekeeper's New Year (August 1st) of each year. Bees that have borne the brunt of the summer's work cannot live through the winter and, as the majority of the bees emerging before September 1st will die before the formation of the winter cluster, it is of prime importance that the colony should start the winter with a force of at least 25,000 to 30,000 (eight to ten frames full of bees) vigorous young bees, emerged after September 1st. If a young queen is introduced by August 1st her progeny will continue to emerge until late in October, supplying the young bees so essential for wintering. Late introduced queens will not only furnish the young bees for wintering to the best advantage, but they will also commence brood-rearing earlier in the spring and by keeping up the egg-laying rate they will produce strong colonies when they are most appreciated.

There are three methods of introducing a queen into a colony: (1) directly from a mailing cage; (2) from a homemade screen cage; (3) by the nucleus method, the latter being the best and surest.

In performing the nucleus method, first of all a nucleus must be prepared. To do this, two frames of sealed brood, with the adhering bees, are removed from a strong colony and placed in a nucleus box a short distance from the old hive. One must be certain that the old queen is not on either of the two frames selected. The space left in the old colony must be filled with two empty frames. The new queen is to be introduced into the small nucleus and kept there until she has started laying.

Remove the old queen from the hive to be requeened and take out two frames from the center of the brood nest. The two frames are to be taken from the nucleus box, with the laying queen between them, and placed in the empty space just made in the colony to be requeened. If the top of the frames, and the bees as well, are sprinkled with dry flour or with sugar syrup, the uniting should occur with no difficulties.

It is hoped that this year special thought will be given to re-queening colonies.

QUESTION AND ANSWER

Q. What has been the total rainfall in Essex County for the month of June and up to July 12?

A. The precipitation as measured at the School in June totalled 4.48 inches—and in July (through the 11th), .66 of an inch.

Bronze Birch Borer in Essex County

Birch trees in Essex County are rapidly being destroyed by an insect species called the Bronze Birch Borer. Many home owners have found the graceful birches indispensable in landscaping their grounds. These birches, of many differing species are subject to the attack of this particular insect and it is safe to say that the great majority of these trees are now infested. It will not be long before they assume the appearance of the many birches which have been already cut down by saddened tree lovers.

The top of the tree first begins to die, the leaves dying on the small limbs. The branches below are then affected and in a few years the tree is usually dead if not cut down in the meantime.

The injuries which ultimately result in the death of a tree are caused by the young larvae which burrow in a zig-zag fashion under the bark, destroying the food and water conducting channels located in this area. With the supply of food and water shut off the branches rapidly dry out and die.

Control measures are impractical and home owners will do well to consider the use of other trees in planning or rearranging the home landscape. Keep in mind the relative permanence of different trees, remembering that quick growing, soft wooded species like poplars and willows are particularly subject to insect and disease attack.

James E. Gallant

Local Credit Group Analyzes Its Loans

Nearly half of the farm loans made this spring through the Lowell Production Credit Association, were distributed to vegetable and fruit growers, according to G. H. Upton, secretary of the Association. On June 15 loans by the association since it was organized early this year amounted to \$48,040.

Repairs, improvements and equipment represented 17 per cent, and loans to poultrymen and dairymen for working capital accounted for 10.5 per cent and 9 per cent respectively. Exactly a quarter of all loans were made to vegetable crop growers, and the classification including fruit and truck crops with vegetables totaled 48.18 per cent of all loans.

In 1933 Massachusetts farmers used more lime per acre of cropped land than any other state in the United States (86 pounds of lime oxides per acre). New Jersey came second with 44 pounds per acre, according to figures compiled by the National Lime Association.

Massachusetts Farmers Spend Needless Million Annually

It is estimated from census figures and elsewhere that Massachusetts farmers spend twenty million dollars annually for feed, fertilizer, and farm machinery. If livestock and poultry were added this figure would be even greater. A recent survey in New York State shows that 83 per cent of the farmers used short term credit; that 66 percent of such credit was obtained from stores and dealers and only 23 per cent from banks. The "store credit" cost from two to three times as much as bank credit.

If these percentages are applied to Massachusetts the cost of store credit is about 1½ million dollars annually. Borrowed at the bank rate of 6 per cent it would cost only two-thirds of a million dollars. Thus our farmers are paying nearly a million dollars more for their feed, seed, fertilizer and machinery than they would if they borrowed from the bank or the Production Credit Association.

Bank credit, when available, is probably the cheapest. But the majority of farmers of Essex County do not have available satisfactory bank credit. What next? The next cheapest and most satisfactory credit facility is the Lowell Production Credit Association. The rate is 5 per cent. Security is based on equipment, livestock, or crops, and credit extends from three months to one year. The borrower must buy 5 per cent of the face of the loan in stock in the bank to show his interest. There is a small appraisal fee but no application fee. The loan committee consists of farmers, interested in farmers' problems and well acquainted with agriculture. Two weeks generally suffices for time from application to receipt of loan.

The officers and directors are: President, George A. Drew, Westford; Vice-President, Selwyn Graham, Burlington; Secretary, George C. Upton, Lowell; Directors: Floyd Verrill, Concord; Paul Swanson, Carlisle; Clinton Raymond, Beverly; Edmund Bartlett, Salisbury.

For further particulars the Secretary may be consulted.

F. C. Smith, County Agent

New Poultry Bulletin

A new bulletin just issued by the Massachusetts agricultural experiment station deals with the history of the twenty years of poultry breed ing experiments conducted there. It tells the methods pursued, the results secured, and conclusions reached which apply to other flocks. A bulletin of real interest to poultry breeders. Copies may be secured at the extension service office.

Fall Projects

Mrs. Mary M. McIntire, Home Demonstration Agent, is completing arrangements for three fall projects in Essex County which will be of particular interest to homemakers.

On September 14 Miss Grace B. Gerard, Home Furnishing Specialist, will conduct a livable living room project, to be held in one community only. Concluding meetings will be held on October 5, November 2, November 23, and December 14.

On September 27, November 1, and December 6, Miss Gerard will conduct a money management project for homemakers.

Mrs. Harriet J. Haynes, State Home Management Specialist, will supervise a county-wide home management project starting September 25, with meetings on October 23, November 20, December 18 and January 15. Time-planning will constitute the essence of her lectures.

Any homemaker interested in these projects is asked to communicate either with her town chairman or with Mrs. McIntire immediately.

Cool Beverages

Grape Juice Punch

1 pint pure grape juice
Juice of three lemons
Juice of one orange
1 cup sugar 2 pints water

Add to grape juice, lemon juice and orange juice, and dissolve the sugar in it. Then add water. Serve very cold.

Fruit Punch—24 glasses

12 oranges, juice of
12 lemons, juice of, or
6 grapefruit, juice of
12 cups water
Sugar or honey to taste

For variations add to above six cups other fruit juice, such as grape juice, loganberry juice, pineapple juice, cider or juice of any canned fruit.

Seasoned Salad For Warm Weather

1 can tuna fish
½ small green pepper
Celery (3 stocks)
3 tomatoes (small)
1 lemon
Lettuce

Pour boiling water over tuna fish, through colander. Let fish cool on ice one hour. Add finely chopped pepper, celery, and quartered tomatoes. Season further with lemon juice (eliminates necessity for salad dressing). Chill three or four hours on ice. Serve on crisp lettuce. Serves four.

Farm and Home Week July 24 - 28

Hatchery Code Discussed at State Meeting

At a State meeting held in Worcester on July 9, recommendations for the hatchery code were voted on by the fifty attending.

After accepting the general principles of the code as it now stands, the primary suggestions for changes were:

1. That hatcherymen be allowed to include as many as four extra chickens with every 100 shipped.

2. That there be no guarantees in advertising.

3. That all newspapers and magazines require that advertising statements comply with the code, before accepting them.

4. That the cost account forms be required only of large hatcheries in Massachusetts and not of the smaller ones.

5. That the departments of farm management in each of the New England states secure at least 20 cost records each and that these be summarized for all of New England, the average to be used in arriving at minimum figures for next year's operation under the code.

6. That the minimum prices be charged for eggs and chix be on a regional or New England basis rather than on a national basis.

Market Gardeners' Field Day Aug. 1

Wednesday, August 1, is the date set for the 16th annual market gardeners' field day at Cedar Hill, Waltham.

Celery, carrot and sweet pepper contests will be judged for the appeal which the packs may have for the buyer. Rules for the contest are:

1. The vegetables must be grown by the exhibitor.

2. A standard bushel box so packed for the Boston Market constitutes an entry.

3. The variety and source of seed must be plainly marked on the box.

4. The vegetables must be on exhibition by 1 o'clock August 1st.

A cup will be awarded for the best box in each contest, in addition to seed awards to lesser winners.

"Therefore, when we build, let us think that we build—forever. Let it not be for present alone, let it be such work as our descendants will thank us for, and let us think, as we lay stone on stone, that a time is to come when those stones will be held sacred because our hands have touched them. and that men will say as they look upon the labor and the wrought substances of them, 'See! this our fathers did for us.'"—John Ruskin.

Glimpses of 3rd Annual 4-H Camp

Director Fred A. Smith of this School, accepted an honorary membership to the Essex County 4-H Club at the final soiree of the club's third annual camp season the last week of June. It was before the largest camp group the club has known since its opening season three years ago that Horace J. Shute, County Club Agent, made Mr. Smith an honorary member.

On the same evening the following campers received the distinction of being chosen to represent each of the 4-H's symbolic of the club:

Head H: Virginia Leach, Winthrop; and Irving Jordon, Groveland.

Heart H: Marguerite Shevenell, Groveland; and Fred Jellison, Newbury.

Health H: Victory Cushman, Winthrop; and Parker Gifford, Middleton.

Hand H: Ruth Irene Wardsworth, Saugus; and Charles Foster, W. Boxford.

Esther Usher of Danvers and Proctor Houle of Newbury were the chosen camp spirits, for which honor they will have a complimentary membership to the camp next year.

Night Pasture For Horses

"Some people believe that horses at hard work do not do well if turned on pasture at night," says E. W. Sheets, of the United States Department of Agriculture. "It has hardly more truth than the supposition that a good-sized thunderstorm will curdle new milk."

"Work horses will pull through a period of hard farm work in much better condition if they are turned out in pastures at night to get some succulent food, take a good roll and rest in the cool air, than if kept shut up in a hot barn."

Although pasture-fed horses will sweat more than those kept off grass, Mr. Sheets points out that a sweating horse will seldom get a sunstroke. Grain and hay should be fed in addition to the pasture for horses at hard work and salt should always be available, because sweating reduces the body's content of salt.

With the tendency toward overproduction of grain crops, farmers are being urged to put more land, particularly good land, into pastures. While the gross income per acre may not be so great as from cultivated crops, the net income from good pasture frequently is greater.

Topsfield Fair September 5, 6, 7

ESSEX FARMER AND HOME MAKER

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NO. 8

Esther Usher State Canning Champion

Esther Usher, of Danvers, has brought honor not only to herself but to the Essex County 4-H Club of which she is a member.

Recognized for several years as a young lady talented in canning fruits and vegetables, Esther recently reached a peak when she was awarded the state canning championship in competition with hundreds of other girls.

Six years a 4-H club member, she has recently won distinction not only in canning contests but for her skill in cooking and for her health record. She is rated as one of the healthiest girls in the state.

With money she has earned through her own garden and as a result of her canning and selling ability, Esther is planning to enroll in the four-year course at Simmons College this fall.

Exhibit of Old Dolls Feature At Fair

At a recent meeting of the committee for the women's department of the Topsfield Fair, plans for this year's exhibits were discussed.

Housed in new and larger quarters, in the industrial building, the women's department will exhibit far more extensively than in any previous year. A special booth will be given over to the display of antique dolls. In another booth will be found household implements of our forefathers.

The usual exhibit of paintings by Massachusetts artists will be augmented, and space will be reserved for the ever popular quilts.

Chairman of the committee for this department is Miss Maidee Polleys of Essex.

**TOPSFIELD
FAIR**
Sept. 5, 6, 7, 8

Topsfield Fair

With the barriers of depression lifted, Topsfield fair officials have plunged into the huge task of arranging the 1934 show with oldtime enthusiasm. The emergencies which



See This at the Topsfield Fair

forced the Essex Agricultural society to clamp down on fair expenditures in the past three years have vanished and the great annual fall spectacle next month will be conducted on a larger scale than ever before. The fair will be held Labor day week, September 5, 6, 7, and 8.

The entertainment and agricultural aspects of this year's fair will present many revolutionary features. New talent and new ideas are being injected into the show, which is expected to set record attendance figures every day. In 1933 the fair directors deviated a bit from the usual method of presenting Essex County's biggest out-door extravaganza, adding a few novel touches and generally speeding up the old standby attractions. The result was a better than 50 per cent increase in the crowds. So the lid is off and it will be "a new deal in fairs" at Topsfield next month.

To prevent the agricultural and educational departments from falling behind the increased attractiveness of the strictly entertainment events, fair authorities this year have voted larger awards for the prize-winning vegetable, animal, fruit, flower, industrial, homemaking and others of the hundreds of exhibits which annually fill the exposition buildings.

The educational displays will be augmented by a number of unique exhibits including tropical fish and plant shows, new classes in the homemaking and handicraft departments, an en-

(Continued page 2, col. 1)

Strawberries Available

Even in this unquestionably poor fruiting year, the Catskill strawberry (formerly Geneva No. 4435) has given such a good account of itself that there is a keen increasing demand for plants. The authorities here at the agricultural school are going to attempt to follow up the sources of a available plants. At the present time a fair stock of potted plants is now available and plants will be offered

by many of our growers at the usual spring planting time. Please let us help you in obtaining your stock of plants.

Next to Catskill, Cato seems to be one of the most promising varieties. It is very high in quality, beautiful in color, and an admirable yielder. The berry being soft is particularly adapted for home use and roadside stand business. The School can supply a limited quantity of this variety.

Lily of the Valley

Do you happen to have a bed of Lily of the Valley which has run out, that is, the flowers are becoming poorer and poorer and are almost ceasing to bloom and nothing but the foliage exists? If this condition exists the fall of the year is the best time to divide the plants. The area should be dug up, the plants shaken free from soil and then by selecting only the strong, vigorous roots they can be reset two or three inches apart just below the surface of the soil. If you are going to do this, it is well to mix plenty of leaf mold and a small amount of old barnyard manure into the soil, so that you will get good vigorous plants to produce blooms in the coming year.

A. M. Davis

**TOPSFIELD
FAIR**
Sept. 5, 6, 7, 8

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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Calendar

August 30-31—Children's Garden Exhibits, Horticultural Hall, Boston.
4-H Day Friday.

September 4—Opening date for new students in the agricultural and homemaking departments of this School.

September 5—Opening date for returning students in the homemaking department.

September 5, 6, 7, 8—Topsfield Fair (Tops them all, 20 miles from Boston on the Newburyport Turnpike.)

September 9-15—Brocton Fair.

September 16-22—Eastern States Exposition at Springfield.

TOPSFIELD FAIR

(Continued from page 1)

larged exhibition of competitive Grange displays, a sheep dog show, additional cattle exhibits, a more complete poultry and rabbit show and new features galore in the flower, industrial and food shows.

For those seeking purely entertainment there will be horse racing, running and trotting, motorcycle races, an airplane meet Saturday, baby show, woodchopping contests, fireworks, vaudeville, steeplechases, American Legion durm corps competition, Indian demonstrations and a host of incidental attractions.

Alumni Notes

Louise McKenney of Lynn, class of '25, is employed by the Singer Sewing Machine Company in Salem.

Tom Marston, class of '31, of Cliftondale, has just completed six weeks at the ROTC at Camp Devens.

Edward Batchelder, '27, of Cliftondale, will have an extensive bee exhibit at the Topsfield Fair.

Gardner Caverley, class of 1922, has recently been appointed tree warden in Ipswich.

F. F. A. Project Tour

The annual project tour and picnic of the Essex Chapter of Future Farmers of America was attended by thirty-five students and six instructors. The first stop was made at Alden Parker's on High St., Topsfield. Parker has a profitable poultry and vegetable garden project on the home farm. He has one hundred laying hens of the Morgan strain, Rhode Island Reds, and 250 chickens. His chix were hatched February 14 and pullets started laying June 21, in less than 4½ months. The mortality of this flock has been under 3%.

The next stop was at the Smolak Farm in North Andover. This is a 200-acre dairy farm formerly owned by Glennie and now operated by Mr. Martin Smolak and his two sons, Teddy and Henry. Teddy has for his project a large area in vegetable crops besides the care of the farm flock of Rhode Island Reds.

The third visit of the tour was in Methuen at the farm of Mr. Charles Nimmo, whose son Archie is carrying a vegetable garden project in connection with his regular farm chores.

A short visit was made to the dairy and poultry farm of Roland Wagner, a graduate of this school in the class of 1932. He employs John Spencer of Beverly, a present student at Essex Aggie. Wagner has built up a 200 quart milk route in Lawrence and vicinity. He also has a fine flock of White Plymouth Rocks.

Instructors E. E. Metcalf and J. E. Miltmore explained the work being carried out on the projects and students who attended the tour were well repaid.

The afternoon was spent at Canobie Lake Park where the boys enjoyed baseball, bowling, swimming and roller skating.

G. E. Gifford

Last Call For Re-Queening

Records show that not less than twenty-five per cent of the winter loss of colonies is due to failing queens.

All queens over one year old should be replaced at once if bees are wanted for orchard pollination next spring.

Eradication of Bang's Disease In Dairy Cattle

The establishment of an abortion-free herd by an intensive system of blood testing and segregation of non-reacting animals can be done as follows:

1. Determine the extent of infection by blood testing every animal.

11. Two methods of eradication that are found very satisfactory are:

FIRST METHOD—Segregation of negative and positive animals.

(1) Segregation of non-reacting animals and the building up of a negative herd.

(2) The negative herd should be completely isolated, having separate attendants.

(3) Repeated and systematic blood testing every two months for the first year and twice a year yearly thereafter should be carried out.

(4) A new negative herd can then be maintained by calves from the positive herd as well as the calves from the negative dams.

(5) Calves from the positive herd should be isolated for at least 50 days before they can mingle with the clean calves.

(6) Introduction of abortion-free animals from other herds are not safe until they have been subjected to at least one test after the completion of a gestation period, if pregnant when first tested.

(7) Doubtful reactors should become consistently negative until a test is made after the cow has calved and tested when not pregnant.

(8) None but non-reacting bulls should be used in negative herds.

(9) All reacting animals in the positive herd should be disposed of as soon as practicable and the barn has been thoroughly cleaned, washed, and disinfected.

This system can only be used where adequate housing and pasturing facilities for both positive and negative herds are available.

SECOND METHOD — Immediate disposal of all reacting animals. Replacement of animals from abortion free herds and the maintaining of a negative herd as laid down under method No. 1.

Sanitary Management by itself cannot be recommended. Sanitary management has reference to handling the herd in a manner that reduces the transference of the germs from the diseased to the healthy cattle. Such management is not popular for the reason that it requires constant vigilance and perseverance and it fails to assure freedom from abortion losses.

Biologics (Bacterin, serum, and vaccine) are not recommended since little or no evidence has been obtained showing beneficial action from their use. Losses can not be prevented.

(Continued on page 3, col. 3)

Dairyman Finds Raising Stock Better Than Buying Replacements

"I want milking cows that will be healthy, have stamina, and the ability to produce a lot of milk of good butterfat content, and I know of no more certain way to get stock of this calibre than to produce it on my own farm." This is one reason which Charles Brown, a successful dairyman of Agawam, gives for raising, rather than buying, replacements for his dairy herd.

"The man who buys all his replacements has to buy too many cows which have been culled out of some other man's herd as not being good enough. But by raising my own stock I know the production ability of the dam and a good deal about the sire, and I also know first what happens during the growth of my young heifers. I cull the growing stock, just as I do the mature cows, and I feel that I have a good chance of maintaining or even increasing the average production of the herd.

"But there is another strong reason why I prefer to raise my own stock and I believe more dairymen are going to agree on this as time goes on. I mean disease prevention. It is too easy to introduce diseases into a good herd by adding a few animals from the outside. Except for tuberculosis there is no certification for freedom from disease. In order to avoid such disease as mastitis and Bang's disease in my herd, I prefer to raise my own replacements.

"So far as the actual cost is concerned, I suppose now and then I could buy an animal such as I want for less money than I can raise one. But in the long run, safely considered, I believe it is cheaper to raise replacements than to buy them."

Blossom-End Rot

When from ten to fifty per cent of the fruits on a tomato plant are diseased the condition is serious enough to be discouraging.

This year in particular many growers are having trouble with their tomatoes, the affected fruit showing a depressed water-soaked area at the blossom end. This area increases in size and the skin becomes black and leathery.

Symptoms of this nature indicate blossom-end rot, a disease which should not be confused with blight. This disease is peculiar in that it is not caused by a specific organism but rather by an upset water balance in the plant. Leaves of the tomato plant seem to have the ability to take up more water than the fruit and when the supply of water is limited the furthestmost areas of the fruit do not receive water and consequently the condition known as blossom-end rot sets in.

(Continued on next column)

New Veterinary In Gloucester

Osman Babson, D. V. M., a graduate of Massachusetts State College and the School of Veterinary Medicine at Cornell University, has recently taken up residence in Gloucester, where he will specialize in cattle diseases.

Dr. Babson is a member of the Phi Zeta fraternity, an honorary veterinary scholastic society at Cornell.

Seaman Knapp Honored By Congress

For the first time in the history of the country, Congress has authorized memorials in Washington in honor of high achievement in the field of agriculture. It is significant that one of the men so honored is the Father of Extension Work, Dr. Seaman A. Knapp.

The 73rd Congress passed Public Resolution No. 33. The resolution designated that the archway connecting the main building of the department of agriculture and the new building of the department of agriculture be known as Knapp Memorial Arch. The archway connecting the new building with the west wing of the main building will be known as Wilson Memorial Arch in memory of James Wilson, Secretary of Agriculture for 16 years.

The Grand Council of the National Honorary Extension Fraternity, Epsilon Sigma Phi, was authorized to place suitable memorial tablets in the archways. It is due largely to the efforts of the fraternity that the resolution was passed.

Children's Garden Exhibit August 30-31

Thursday and Friday, August 30 and 31, are the dates for the children's garden exhibit at Horticultural Hall, Boston.

Friday will be 4-H day. There will be twenty-seven classes for vegetable and flower exhibits.

Members are encouraged to enter the judging contests.

A high percentage of diseased fruit may be expected on plants showing a heavy set of fruit when the water supply is limited. The percentage declines with a decrease in "set."

Being physiological this disease cannot be controlled by spraying but any practice which will conserve or increase soil moisture will be helpful. Both the early and late blights can be kept under control by proper spraying but during dry summers blossom-end rot should be expected and growers should not be too concerned about their losses.

J. F. Gallant

New Apple Inspection Service

Since 1929 the 90% Clean Apple Club, with its emphasis on preventable blemishes, has helped to establish a new standard for orchard pest control.

A new plan for this season will be attempted, calling for a thorough inspection of a two-bushel sample picked by the grower himself. The check-up will not only cover preventable blemishes but will also include color, size, and grade of the fruit. Since the sample is to be an unofficial one, no publicity will be given to any of the individual scores.

Results: The grower will be given a report in detail, stating the percentage of clean fruit, of extent of injury from various pests, and a notation of factors responsible for off color, size, or pest damages.

There is no charge for this service. Write to the County Agricultural Agent, F. C. Smith, Hathorne, if interested in a check-up.

ERADICATION OF BANGS' DISEASE

(Continued from page 2, col. 3)

ed by the administration of drugs or medicinal compounds.

The course to pursue in infected herds depends on how extensively the disease has spread, whether the animals are especially valuable, whether facilities exist for having abortion tests made, and whether provision can be made for dividing and maintaining the herd as two units between which there is little or no communication.

One should become as thoroughly informed as possible as to the conditions that prevail in his particular herd, whether the disease appears to be active or more or less quiescent, whether a practice is made of making frequent purchases and sales of animals or otherwise, whether the herd consists of purebreds or grades, whether the dairy products are pasteurized or not, what facilities exist or can readily be provided for separating the herd into units, how large a percentage of the animals have already acquired the disease as well as other matters.

After studying his condition he should determine if either of the above methods are practicable and economical and best suited to his specific circumstances and conditions. If not, he should seek assistance in the selection of an appropriate course of action.

The County Agricultural School and State Officials are specially qualified to give such assistance.

The Federal Government is now prepared to give compensatory indemnity to the owner of each animal condemned and removed from the owner's herd. Twenty dollars (\$20) is allowed for grade cattle and fifty dollars (\$50) for pure bred.

K. W. Forman

Round About The County

Home nursing groups scheduled for September have been tentatively formed in the following communities: Haverhill, Groveland, Wenham, and Peabody.

The classes will be held under the direction of Mrs. Mary E. Roundy, R. N., Home Nursing Instructor.

Projects to be stressed this fall are: Time Planning, under the direction of Mrs. Harriett J. Haynes, Home Management Specialist, Home Accounts, and the Livable Living Room, supervised by Miss Grace B. Gerard of Massachusetts State College.

Rules and Regulations For 4-H Exhibitors At Topsfield Fair

1. Entries close August 31, 1934.
2. The department is open to any 4-H club member in Massachusetts.
3. All entries must be made by giving the Class number on the entry blank.
4. Exhibits shall have been produced, made, or grown, by the exhibitor during the 12 months previous to the exhibition.
5. Exhibit must be in place by 10 A. M. Wednesday, September 5, 1934.
6. Every exhibit must be plainly marked with class, owner's name and address.
7. The committee will reserve the right to exclude any exhibit of inferior quality.
8. An exhibitor shall not make more than one entry in any one class. A prize will not be awarded an exhibit unless it conforms to the class as specified.
9. The Agricultural Society offers prizes which are listed on an entry blank. This blank may be obtained through H. J. Shute, County Club Leader.

Recent and Valuable Bulletins

The following bulletins are concise, and will be valuable to dairymen in particular:

"Soybeans for Massachusetts", Bulletin No. 309, Massachusetts State College.

"Dairy Barn Construction", Extension Leaflet No. 111, Massachusetts State College.

"Milk Control Law", Room 136, State House, Boston.

"Cost Accounts on New York Farms", Bulletin No. 554, Cornell University Experiment Station, Ithaca, N. Y.

"Efficiency Studies in Dairy Farming", Bulletin No. 295, University of New Hampshire, Durham, N. H.

Planning Your Foundation Plantings

Perhaps you have wanted to have a foundation planting of evergreen shrubs about the home. If that is the case the months of August and September offer excellent opportunities to establish such plantings.

In planning a foundation planting there are two portions of the building which should be considered, the doorway, and the corners. An attempt should be made to make the doorway as attractive and inviting as possible, while the corners of the building should be tied into the ground by the use of tall growing plants.

The question frequently comes up as to whether or not the evergreens are the correct plants to use for foundation plantings. It is largely a matter of taste.

Evergreens perhaps furnish the best solution to the question of a restrained foundation planting. A good way to handle the problem is to use evergreens about the doorway proper and to use deciduous shrubs such as Lilac, Forsythia, or some of the other attractive shrubs on the corners of the building.

The decision as to whether or not you are going to use evergreens or other types of shrubs will depend entirely on your own particular like and dislike in this matter.

In using evergreen material the yews, junipers and some of the arbor vitae, the rhododendrons and possibly some of the pines are the most satisfactory plants for foundation plantings. Any good nursery catalogue will give you a description of the plants, tell you their eventual height and the size of the spread. From this information you can safely plant and allow them to develop over a period of years into fine specimen plants.

The point to be borne in mind is this: from now until the latter part of September is a perfectly safe time to make any evergreen foundation plantings, or to use evergreens in developing any piece of property. By putting them in at this season of the year, you will have a considerable head start over what you would have if you waited until next spring.

(Condensed from an article written by A. M. Davis, authority on home grounds improvement, M. S. C.)

Project Dates

Money Management Project

(Conducted for women in Essex County by Grace B. Gerard, Home Furnishing Specialist.)

September 27—all day

November 1—all day

December 6—afternoon

Livable Living Room Project

Arrangement of Furniture for Comfort and Convenience, Sept. 14

Notes From the Wo- men's Extension Service

The first fall meeting of the advisory council of the Women's Extension Department in Essex County, will be held on Thursday, September 18 at the Essex County Agricultural School, at 10.30 A. M.

Mrs. Mary M. McIntire, Home Demonstration Agent, and Mrs. Mary E. Roundy of the Extension Service, visited Amherst during Farm and Home Week, attending the homemakers' dinner at Wiggins Tavern, Northampton.

Easy Method To Can Tomatoes

Speedy work insures quality in canning tomatoes point out specialists at the Massachusetts State College. Tomatoes are easy to can, and when spoilage does occur, it is usually caused by allowing them to stand in a warm room for some time while they are being prepared for processing.

To avoid this spoiling, work quickly, process promptly after packing, and cool immediately after processing. Select tomatoes that have been well ripened on the vine and do not can tomatoes that show much green at the base of the fruit. Discard any fruits having decayed portions.

Wash the tomatoes to be canned in cold water. Blanch to loosen skins. The time required for this will vary depending on the amount of water and tomatoes. Generally from 1 to 1½ minutes will be sufficient if boiling water is 4 or 5 times the weight of the fruit. Cool at once in cold water.

Then, with a sharp pointed knife, remove the core from the stem end by cutting out a conical shaped piece.

Strip off the skin and remove the black tip at the blossom end of the fruit.

Fill the jar about half full and press contents down with fingers. Continue to pack, pressing down to secure a solid pack until the jar is full. Press out 1-2 to 2-3 cup of juice per pint jar. One-half teaspoon salt should be added for each pint.

Cover and process—30 minutes for the pints; 40 minutes for the quarts. Then remove from processor and complete the seal by pressing down the side clamps on the jars. Set aside to cool.

THE EIGHT "DO MORES"

Do more than exist—live.
Do more than touch—feel.
Do more than look—observe.
Do more than read—absorb.
Do more than hear—listen.
Do more than listen—understand.
Do more than think—ponder.
Do more than talk—say something.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 15

HATHORNE, MASS., SEPTEMBER 1934

NO. 9

Save Leaves; Don't Burn Them

The season is at hand when residents of our shaded thoroughfares, in a commendable effort to maintain their grounds in the same orderly and faultless condition they have enjoyed all summer, will be seen raking and burning the fallen leaves. A very few will gather the leaves in cradles, bags, or baskets and lay them away to make leaf mold. These same people who burn their leaves complain most loudly of their drought-burned lawns and sun-baked gardens. They may wonder why mineral fertilizers do not produce the results expected of them.

Home gardeners able to obtain or purchase farm or stable manure have no cause to save their leaves, but the majority of home owners have no such source at hand. To such, all vegetable wastes of their grounds and household represent a source of the fiber and mold their impoverished lawns and gardens are demanding—fiber to aerate the soil and prevent its packing, mold to hold the moisture that dissolves and retains the raw food materials hungry plant root hairs are ready to absorb. Leaves, weeds, unfested plant tops, lawn clippings (when too heavy to work into the lawn), and even garbage are being thrown by scores of people into compost heaps or pits where slow oxidation and fermentation reduce the mass to vegetable manure. Leaves alone, from our deciduous trees, in a year's time, make the best of manures—leafmold—for upbuilding our soils and subsoils in the one essential most generally lacking, namely, water-holding capacity. When commercial fertilizers are added to a soil rich in leafmold they are more effective than when applied to a soil from which the vegetable matter has been largely burned out.

The writer has repeatedly made superior garden loam by mixing dark brown leafmold with yellow subsoil.

Probably the matter of storage space is the principal deterrent from conserving leaves and garden wastes. Yet, there is seldom a town or suburban lot too small to afford at least pit room. A trench in or alongside the garden is used by some. The trench is filled with leaves, and soil is thrown over them. An unused bulkhead is being used in one case. A barn or garage cellar makes an excellent storage place for leaves. An attractive boarded-in bin or yard behind the garage or other outbuilding, and open to the weather, serves the

(Continued on page 4, col. 3)

Grange

5th and 6th Degrees in Preparation for the 7th Degree at Hartford Nov. 14-23.
5th Degree—Wednesday, October 17 at W. Gloucester.
6th Degree—Saturday, October 27 at Haverhill, also Monday, October 29 in municipal auditorium, Melrose.

Phenomenon of Nature

As autumn approaches we notice the remarkable change in the coloration of the foliage around us. This color change does not seem to be of any functional value to the plant but merely represents a huge chemical incident comparable to the brilliant coloration seen in the sky at sunset. This indicates to us that nature does have supreme moments of beauty and charm.

The underlying principle of this color change lies in the fact that with waning vitality, brought about by old age or the coming of autumn, a leaf stops making chlorophyll (green-colored material) and that which is present fades rapidly away permitting other colors which are present, but are not seen through the summer, to reveal themselves. It is then that we get the combinations of red, yellow and brown so brilliantly portrayed in the leaves at this time.

The coloration is more brilliant in climates where the transition from summer to autumn is rather abrupt and the vitality of the leaves is suddenly checked. It is through the abrupt check to the vitality of the leaves that early frosts help the coloring, though they do not cause it, as some people believe.

A. G. Perkins,
Instructor in Science

Winners At Topsfield Fair

Many students of this School, entering exhibits at the Topsfield Fair this year, were well rewarded for their interest and endeavors. Of those competing in the Youth Department, the following were awarded cash prizes and ribbons:

James Nicoll, Ballardvale, two first prizes; Gilbert Freeman, Beverly, two firsts, two seconds, and one third prize; Richard Colby, Haverhill, two firsts and one third; T. A. Nimmo, Methuen, three firsts and one second;

(continued on page 3, col. 3)

New Fruit Varieties

Tests made in this unusual year have cleared up several facts in regard to new fruit varieties.

One of the fruits which appears to need more emphasis is the plum. Because of the inferior varieties plum-growing has almost ceased in this region. Today we have a list of new, choice varieties which are well worth the attention of the amateur gardener and to some extent to the commercial grower. Plums are exceptionally valuable in the human diet.

Among the early plums, Santa Rosa and Beauty, Japanese varieties, are of very high quality and they add materially to our August fruit supply. A beautiful little golden yellow plum called American Mirabel is very high in quality and will make an outstanding plum for preserving and jam-making. The real treat however comes in the European type of varieties which are good for eating in the fresh condition and preserving. Here we have an exceptional list: Stanley is a beautiful deep blue plum of the prune type, having a sweet dry, delicious fruit. This is closely followed by the varieties: Albion, Hall, Imperial Epineuse, and Sanois. These varieties range in color from reddish to deep blue and are outstandingly valuable from a quality standpoint. Hall particularly is a very rich, deep blue plum ripening about September 20.

Apples

Red Gravenstein has proved this year to be very excellent and has had its first test in any considerable quantity on our marketing stands where it is being well received. Milton is again proving to be a high quality and beautifully colored early apple for sale during the first half of September. One of the new crab apples which is both beautiful (being of a carmine red) and useful (in jelly), attraction much attention is the Dolgo crab.

Many of these varieties can be seen in and out of season at the testing grounds at the Agricultural School. Interested parties are advised to visit the orchards to see them, test them, and ask questions concerning their usefulness and probable sources, and where they can be obtained.

Fruit Fragments

Richard Murray, class of 1923, officiated as auctioneer for the Saturday evening vegetable sale at the Topsfield Fair.

Edward Batchelder of Cliftondale, class of 1929, had a creditable display of honey in commercial containers at the Fair.

Essex Farmer and Homemaker

HATHORNE, MASS.

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Calendar

- October 1. Return of advance students in the agricultural department.
- October 3. Fruit judging at Massachusetts Horticultural Hall.
- October 12. Football at Wentworth Academy.
- October 19. Marketing trip to Boston Junior students.
- October 26. Football—Keith Academy—here.
- November 27. Graduation.

1934 Football Schedule

Announcement of the fall football schedule reveals a rousing season for Essex Aggies:

- October 5—Open
- October 11—Wentworth Institute here
- October 19—Open
- October 26—Keith Academy here
- November 3—Northeastern Freshmen there
- November 9—Angel Guardian here
- November 16—Stockbridge Aggie there

Kenneth and Albert Nunan, '34, florists and landscape gardeners in business with their father, A. D. Nunan, have recently completed landscaping the Cliftondale Grade School grounds and are now at work on the grounds of the Saugus High School.

New Students Agricultural Department

Entering this fall as new students in the agricultural department of this School, are:

Philip Coles, James Keane, Earle Rich, Nahant; Myron Eastwood, Methuen; Roy Ford, Fred Scribner, Topsfield; Donald Gasper, Philip Harding, Paul St. Linger, Warren Towne, Beverly; Clifton Hatch, Salisbury; Thomas Kenney, James Webber, Middleton; Boleslaw Dempski, Stanley Prophet, Haverhill; George Tucker Earle DeVeau, Newton Goodwin, Russell Hurd, Christy Mavros, Nicholas Nicholopoulos, Arthur Pilling, John Young, Walter Allen, Lynn; Clark Gowen, West Newbury; Sargent Griffin, Hugo Jacobson, Stanley Lane, Gloucester; Walter Hichens, West Lynn; Daniel Leichner, Jr., Lynnfield; Noble Austin, Amesbury; Albert Batchelder, Alfred Boucher, Francis Connolly, Andover; Nicholas Bezemes, Sheldon Robinson, John Zieldski, Peabody; Robert Bingham, Patrick Lawlor, Henry Smolak, Alexander White, William Whittaker, John Wilcox, North Andover; Robert Cameron, Paul Day, Melville Low, Saugus; Bruce Barr, West Peabody; Karl Beal, David Elwell, Essex; Stanley Bellwood, Joseph Bergeron, Warren Bernard, Alphonse Bosse, Francis Gillen, Philip Guglielmino, Gerard Hamel, Norman Henry, Robert McLean, Charles Mahoney, Lawrence; Joseph Blunda, Charles Chambers, Norman Chambers, Ipswich; James Cashman, Ronald Gourley, William Howard, Palmer Jones, Warren Kneeland, Emile Onelle, Rosario Richards, Walter Tataronis, John Monroe, Salem; Elmer Luxton, Wenham; Everett Mitchell, South Hamilton; Aleron Noyes, Boxford; Frederic Piper, East Lynn; John Marshall, Danvers; George Morrill, Philip Pingree, Newburyport; Norman Peatman, Ballardvale; Clayton Teague, Marblehead.

Alumni Notes

Roy Frost, class of 1927, herdsman at the Ackerman farm, has fully recovered from his recent accident with a bull.

Earle Blake, class of 1930, Andover St., Peabody, exhibited three Guernsey heifers and a young bull from his herd at the Topsfield Fair. His bull was awarded a fourth prize.

Olin Donnelly, class of 1933, is employed at the Argilla Farms, Ipswich.

Bradford Webb, class of 1931, exhibited fruits at the Fair; Jack Wong, class of 1933, was operating a booth at the Fair, and Alfred Cipolla, also of the class of '33, assisted in the 4-H booth at the Fair.

New Students Home-making Department

New students in the homemaking department are:

Dorothy Abbott, Lemyra Briggs, Marjorie Hirst, Lillian Jackson, Gertrude Lawton, Methuen; Beverly Bird, Marjorie Colby, Myrtle Edwards, Dorothea Granger, Betty Hawkes, Gertrude McAdoo, Harriett McAdoo, Dorothea Spencer, Saugus; Harriet Bruce, Ruth Cadoo, Barbara Currier, Rachel Cutter, Hazel Ogden, Arlene White, Newburyport; Margaret Foss, Essex; Thelma Alexander, Nahant; Elsa Axelsson, Florence Hoyt, Phyllis Hoyt, Josephine McDermott, Mary Newton, Mildred Walker, Ethel Webb, Dorothy Woodman, Danvers; Ruth Fossa, Edith Jones, Marjorie Kneeland, Claire Linehan, Mary McCarthy, Loretta O'Connor, Frances Parent, Marjorie Perry, Marguerite Sexton, Eleanor Stevens, Amelia Tataronis, Salem; Dorothy McCarthy, Claire Callahan, Clare Fitzsimmons, Margaret Mahoney, Yolanda Scamperino, Lena Tela, Mildred Wirth, Lawrence; Eva Deloge, Anna Gioco, Priscilla Holt, Patience Kruschwitz, Eileen Murphy, North Andover; Shirley Hagar, Wenham; Helen Lucas, Hilda Putnam, Peabody; Charlotte Moore, Leila Moore, Salisbury; Helen Camille, Carolyn Davis, Louise Semple, Gloucester; Barbara Clark, Elnora Covell, Pauline Morrissy, Anna Scanlon, Mildred Snow, Martha Vining, Evelyn Young, Lynn; Ruth Graf, Idalia Hanson, Rowley; Deborah Knowlton, Virginia Sweet, Edna Wilmot, Beverly; Ruth Poirier, Groveland; Phyllis Steele, Florence Woodbury, Middleton; Ruth Wheeler, Anita Granville, Eleanor Chambers, Marblehead; Ruth Webb, Phyllis Zerbe, Andover; Adeline Templeman, Cliftondale; Martha Ziskowski, West Peabody.

Marriages

Nathaniel Hart, class of 1931, to Miss Hazel Hopping of North Andover, on September 2, 1934.

Nathan Hale, class of 1928, to Miss Gertrude Barnes on June 23, 1934.

G. Stanley Smith, class of 1926, of Rowley, to Miss Bertha Frances Swap, of West Newbury, on March 31, 1934.

Word has just been received of the marriage in 1932 of Ralph Noyes, class of 1931, to Miss Grace M. Howe. They have one son, George Emery Noyes, born October 3rd, 1933, who was awarded a certificate for perfect health at the Topsfield Fair.

Arthur Gordon, Rowley, '29; Harold Rogers of Ward Hill, '28; and Roger Lewis of Andover, '25, served on the vegetable committee. Mr. Lewis was awarded first prize in a roadside stand competition. His sister, Dorothy Lewis of this year's graduating class in the homemaking school, exhibited canned goods on the stand.

Fall Care of Bees

The full honey flow usually stops with the first killing frost. Before that time all colonies should receive a final checkup. Plenty of honey must be left for the winter. Single-story colonies should have the combs two-thirds to three-fourths full of honey and two-story colonies should have the upper ten combs full of honey. If it is found that there are amounts less than this, a syrup, made of half granulated sugar and half water, should be fed as soon as the fall honey flow stops.

Weak colonies should be united at this time if not previously.

The practice of moving combs of honey from one colony to another to equalize winter stores may lead to the spread of disease. It is safer to feed sugar syrup and to extract the surplus honey if one is located where American foul brood is apt to be contracted.

Winter insulation may be added any time after the colonies have been prepared as above. Winter loss may be decreased if the bees are moved to a less windy location before insulating. Any loss of field bees will not be serious as most of the field bees at that time of year will be the old ones which would soon be driven out anyway.

Two-story, ten-frame hives are producing more honey, wintering better, and will have more field bees for the fruit bloom than the one-story hives. The management of a two-story hive also is simpler than that of a one-story. If your colonies are not already two-story hives why not plan to add the extra story next spring during fruit bloom? Getting the hives and frames ready this winter will provide slack-season employment.

G. A. Meigs,

Judging Results Brockton Fair

Of the thirty-six contestants in vegetable judging at the Brockton Fair, Frank Conti, Lynn, Elmore Smith, Lynn, and Charles Clinch, Swampscott, all students of this School, placed fourth, fifth and fifteenth respectively.

In poultry judging, Joseph Andreas, Beverly, tied for fifth place, and Thomas Swiniarski, Peabody, tied for seventh.

WINNERS AT FAIR

(Continued from page 1, col. 2)

Leonard Briody, Beverly, one first, one second and one third; Lucille Legasse, Haverhill, one second; Gilbert Wallace, Bradford, one first, and one third; William Hayes, Beach Bluff, one second; Lorin Clark, Merrimac, one first and one second; Dora Winchester, Saugus, one second; Teddy Smolak, North Andover, one first; Elmer Aldrich, Beverly, one third; E. H. Bessom, Lynn, one first; and Alden

Poultrymen Should Cull Laying Flocks in Sept.

John Vondell, of the Massachusetts State College, advises September culling in the flocks which are just completing their first laying year. Those which are satisfactory for breeding purposes should be sorted from the others. Birds of medium quality may be saved as layers until they stop, but the poorer quality, or culls, should go to market immediately.

The most desirable birds to keep as breeders are those which have laid continuously since last fall, without a pause to molt or without going broody. These birds will have pale vents, beaks, and shanks, because the yellow color gradually disappears from these parts as the laying season advances. The presence of new primary feathers in the wings indicates that the bird has molted, and at this time of year that should disqualify a bird for breeding purposes.

Good breeding birds should be large, but have refined heads, characters which are easily picked out by an experienced poultryman. Birds which have large masculine heads and thick shanks are undesirable for producing the 1935 crop of chicks.

Birds which are not laying and which have produced some new wing feathers in the last few months should be discarded from the laying flock, and replaced by pullets.

A well illustrated booklet on the culling and selection of hens and pullets has been issued recently by the Massachusetts State College. It discusses the principles and method of culling laying birds and pullets in a manner which beginners can readily grasp. This bulletin is available free of charge at the Extension Service, Massachusetts State College, Amherst, Mass.

News of the School At A Glance

On September 12 and 13, the School exhibited new and rare varieties of fruit at the Amesbury Fair.

The first term in the homemaking department started the week of September 3. New students were admitted to the agricultural department on the same date. Advance students will return on October first.

Over forty new text and reference books have been added to the School libraries. Six were the gift of Miss Margaret Harris to the homemaking school.

Parker, Topsfield, two firsts and three seconds.

Adult Vegetable Department

Competing in the adults vegetable department, Gilbert Wallace was awarded a first prize for his shell beans.

Need To Conserve All Forage Crops

Officials of the United States Department of Agriculture who have been studying the feed supply for the nation have reported that there is a sufficient supply of forage crops for all the livestock in the country if the feed is harvested, stored, and properly distributed to regions where there is a shortage.

Although Massachusetts ordinarily imports a considerable amount of hay from other states, Ralph W. Donaldson, extension agronomist of the Massachusetts State College, believes that the Bay State dairyman may find it more economical to try to produce his own forage and roughage crops this year.

He suggests that there may be idle grass land on many farms where the hay could be cut, even though it may be of inferior quality. Farmers who cut their hay early in the summer should be able to get a second cutting by this time.

Sweet corn stalks from a market garden have considerable feeding value, especially if they are converted into ensilage; or they may be stored and fed during the winter as fodder.

Many farmers who are unable to store enough hay to last until next summer may find it advisable to make seedings of rye or of wheat and vetch to provide early spring pasture, and thus relieve the need for hay. Mr. Donaldson recommends seeding rye at the rate of two bushels to the acre; or a bushel and a half of wheat plus 20 pounds of vetch seed to the acre. The latter combination should be seeded as soon as possible; but rye may be seeded until the first or second week of October.

Quality Products

Does it pay to purchase products at the roadside markets displaying a Massachusetts Bay State Sign?

Recently a lady stopped at such a market, and while purchasing her products she remarked on the high quality of the vegetables and fruits offered for sale. During the conversation she mentioned having stopped recently at a stand where she had been disappointed in her purchases. When asked if the stand displayed a Bay State Sign, she replied that she had not noticed one.

The attendant then explained to her that the purpose of the Sign is to guarantee quality products, and that since the roadside markets bearing the Sign are frequently inspected by representatives of the State Department of Agriculture they must meet and maintain the high standards adopted by the department.

These standards include high quality, moderate prices, clean stands and surroundings, courteous and honest attendants, honest packs of locally produced products and proper markings.

Reworking the Perennial Border

A. M. Davis, Horticulturist

At this season of the year, with the exception of asters and chrysanthemums, since they live through the winter, perennial borders look as if they needed a little attention and doubtless they can well stand some. Now is the best opportunity that the gardener will have to rework or remake the border. I would suggest that at this season of the year you decide on which areas or which portions or whether the whole of the garden needs attention, and that you go out with a digging fork and carefully lift all of the perennial plants. These plants can be placed on burlap bags in a shady part of the lawn and will be perfectly safe there until they are reset back into the garden. In doing this, let me suggest that you do not dig up the whole garden at one time but that you only take what you think you could accomplish in a day if you have a day that you can devote to it. After you have taken out the plants, apply a liberal application of plant food, preferably in the form of well rotted barnyard manure, to the garden area. This should be spaded in deeply, the ground reworked and then you are ready to reset your plants.

In resetting the plants, instead of just taking the clumps out and setting them back in where they came from do two things. Many of the clumps will need to be divided as well as reset. That should be done. Then if you have plants such as Day Lilies which have grass or other weeds growing in them, the weeds should be carefully taken out. A little pruning, perhaps some dividing and weeding out will do much to give you a neat appearing and weed-free garden next spring. I would not at this season of the year divide Iris, although it is permissible to do so, and it is desirable to weed out any clumps of this plant which may be filled with witchgrass. After the plants have been weeded and divided, they can then be reset into the garden in order of color combination and period of bloom which will appeal to the gardener. Remember that it is desirable if possible to get a full season of bloom in a perennial garden rather than six months of brilliant show and then the balance of the year simply foliage.

HOUSEPLANTS

If you are planning to have houseplants this winter, get them as early as possible, pot them up in a soil which contains some plant food, preferably bonemeal, and place them indoors in front of open windows as long as possible so that they will gradually become acclimated to the conditions in which they have to live.

A. M. Davis

DWARF ASTERS

If you have been growing dwarf asters in your garden and have had success with them you will be interested to know that these plants can be brought indoors and treated as house plants, giving excellent results for a long period of bloom. In order to do this, thoroughly saturate the ground around the plants which you are planning to move, then carefully dig up the plant and place it in a flower pot large enough to accommodate its root system. Press the soil around the root firmly and cut off all the large flowers so that they will not evaporate water too rapidly.

The plants can now be brought indoors and placed in a sunny open window for awhile. It will continue to bloom nearly a month. The same treatment can be used for bringing fall blooming chrysanthemums indoors and having them bloom as houseplants if one wishes to do so.

Livable Living Room

Miss Grace B. Gerard, Home Furnishing Specialist, will start the Livable Living Room project in Essex County on Friday, October 5 at 1:30 P. M. in Gloucester. Anyone interested in attending this project may communicate with Mrs. Fred H. Works, 13A East Main St., Gloucester. Three additional meetings will be held on November 2, November 23 and December 14.

Home Accounts

New projects to be given in Essex County this fall by State Specialists will start on September 27 when Miss Grace B. Gerard will conduct the first of four lessons in Home Accounts at the Essex County Agricultural School at 10:30 A. M. Concluding meetings will be held on November 1 and December 6.

Planning Your Time

Mrs. Harriett J. Haynes, State Home Management Specialist, is planning to meet with a leaders' group at this School on Tuesday, October 2. The project to be discussed will deal with time planning in the home.

BLEEDING HEART

Many people are interested in propagating bleeding hearts and wonder when the best season of the year is to do this. You will find that this plant can be safely divided in the fall of the year and reset in a desirable location which should be moist and partially shaded if possible. This location will give good results next spring. In preparing soil around bleeding heart a little bone meal worked into the soil is a very satisfactory plant food.

A. M. Davis

Crab Grass, Lawn Pest Can Be Controlled

Crab grass, the tough, thick-leaved grass present in many lawns at this time of year, is one of the worst enemies of a good lawn but it can be controlled, according to Arnold M. Davis, extension horticulturist of the Massachusetts State College.

An annual plant, it re-seeds itself every year. Catching the clippings in a canvas basket attached to the lawnmower is one way of reducing the amount of seed which falls on the lawn to produce next year's crop of undesirable grass. Raking the patches of crab grass, until the plants tend to stand upright, and then mowing immediately, helps cut off more of the plant, and makes sure that the stems bearing the seeds will be cut.

Applying fertilizer to the lawn this fall and again next spring will stimulate the growth of the desirable grass plants, such as blue grass, bent grass, and red-top, which will tend to crowd out the crab grass next year.

Probably the most effective method of getting rid of crab grass is to dig it out with a jack-knife. If started soon enough, before the plants get too numerous, it will be possible to keep the crab grass under control. Unless large areas have been covered with the intruding weed, it will not be necessary to use any additional seed in the lawn this fall, as the regular lawn grass will spread sufficiently to fill small bare spaces by the early part of next summer.

"Facts on Lawn Management," a leaflet issued by the Extension Service of the Massachusetts State College, Amherst, contains several good fertilizer formulas, and gives general rules on the care of lawns. It is distributed free of charge to those who request it.

Meeting of Advisory Council

The advisory council of the women's division of the Essex County Extension Service will meet here on Tuesday, October 9, at 10:30 A. M. to discuss plans for the coming year.

SAVE LEAVES

(Continued from page 1)

purpose well. A rather more elaborate but very practical structure where greater seclusion is required is a concrete or brick-lined pit in the backyard, with earth bottom, and a wooden or iron grating to let in air and rain. And one case is on record where a pit was dug between the concrete wheel tracks in a garage, the pit walled with concrete, and a slat cover constructed to admit air and permit wetting the leaves down with a hose. In all cases any fire hazard created by the storage of dry leaves in or about buildings is offset by blanketing the pile with loam or subsoil and keeping the pile wet.

H. Linwood White

ESSEX FARMER AND HOME MAKER

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HATHORNE, MASS., OCTOBER 1934

NO. 10

A New Course In Interior Decoration

To make a course of study in Interior Decoration practical and interesting for a group of women requires careful thought and planning. To organize such a course for young girls of high school age, to whom a home of their own still seems remote, is quite a challenge. A new course is being developed in the School's Home-making Department this year which it is hoped will meet this challenge. Such a course offers a real opportunity to stimulate a desire for beauty in the home, to learn to see beauty, and oftentimes, with the cooperation of those at home, offers a girl the hitherto unexpected opportunity of developing some simple decorating project in her parents' home. The resulting value through the enjoyment gained from such self-expression is immeasurable.

Strange as it may seem to some, a solid foundation study of period furniture is offered first in this course as being most vital. "So few people would use even reproductions of Jacobean furniture," a person might say, and "much of the French period furniture seems impossible. Why bother to study it?" Jacobean furniture was the inspiration of the early American furniture in the colonies, and furniture of French style is often incorporated into a modern bedroom with charming results. A study of period furniture enables one to recognize not only the antique but to recognize a good reproduction from the many inferior reproductions on the market. It also gives a standard of the best in design which gradually becomes absorbed by the student and thus avoids stereotyped lessons in good and bad design.

Next in importance to the study of period furniture is that of furniture arrangement and so will be offered next in the course. Magazines on home decoration offer pictures of good furniture groupings which will be studied, and then, as arrangement of actual furniture is not possible in the classroom, pieces of paper cut to represent furniture will be arranged by the pupils on floor plans given them. This room arrangement will be further developed by the decision of the pupils as to what style of furniture each article would be if purchased and also what the color scheme of the room would be, using actual samples of materials.

There will be an exhibit of wallpapers and wall colors and every effort

(Continued page 3, col. 2)

The McIntosh Family

Fruit growers, urged by their consumer customers, seem rightfully to be more interested in the succession of McIntosh apples which are now rapidly becoming available. All of the varieties mentioned below except Kendall have been fruited and in most cases exhibited from the fruit testing grounds here at the School. At the



foods Rich in Proteins
For Strong Muscles and Firm Flesh

risk of appearing to supply a mere catalog of names we are offering the following list of McIntosh-like apples for your consideration.

Variety	Season
Early McIntosh	August
*Milton	September
Patricia	September
*Melba	September
*Lobo	September-October
*Joyce	October
McIntosh	October-December
*Sweet McIntosh	Oct.-Dec.
*Kendall	November-January
*Cortland	December-February
*Macoun	January-March

(*Very highly recommended; *Highly recommended; *Recommended for commercial planting.)

Of all the McIntosh crosses which we have tested Joyce clearly leads the others. This is a small, beautiful, red-cheeked over yellow base apple of very superior McIntosh quality. We can recommend this highly for use in home gardens and choice fruit collections. The variety is open pollinated and originated at the Canadian

(Continued on page 4, col. 3)

Herbs — Aromatic To The Taste and Smell

Herbs are once again causing adventurous comments at garden clubs and over tea cups. The very same herbs whose aromatic fragrances and flavors were cherished by our ancestors, are suddenly metamorphosing our own delinquent dishes.

There are a few real gardeners who will be out on the heels of Spring squaring off corners in their gardens for thymes, basil, savories, chives and fennels or sweet marjoram, dill, caraway, mints and sages. For fragrance they will plant lavender, rosemary, bee balm, spearmint, verbena, and rose geranium.

Herb teas are said to insure sweet dreams and quiet sleep, and Helen Morgenthau Fox, author of "Gardening with Herbs" has asked: "How could it be otherwise when the last waking sensations are of a warm, golden liquid exhaling a delicious aroma?"

Discretion is the soul of herb flavorings. They should so blend with a meat, vegetable or egg dish that the original flavor is merely enhanced, not dominated.

Cooking with herbs is a gentle art, but such tempting recipes as green pea soup with mint, and cutlets Maintenon, instill a desire to master this art.

"Green Pea Soup with Mint

1 quart fresh peas 1 onion
1 large or 2 small sprigs of mint
1 tea-spoon spinach juice
1 tea-spoon salt 1 tea-spoon sugar
4 table-spoons butter 2 egg yolks
1-2 cup cream

Shell the peas, and break up the pods; wash the pods and boil for two or three hours in the water in which other vegetables have been cooked if possible. Strain and add the peas, the onion, mint, salt and sugar, and three pints of water in which the pods were cooked. Cook until the peas are tender, then rub through a sieve, add butter, spinach juice (for color) and bring to boiling point. Season more if needed, and just before serving add the egg yolk diluted with the cream. Cook, stirring constantly for five minutes, but do not allow the liquid to boil. Strain and serve with croutons.

"Cutlets Maintenon

Have cutlets from a leg of lamb cut about 3-4 of an inch thick
1 egg slightly beaten and diluted with 1-4 cup water
Bread crumbs mixed with chopped thyme, parsley, marjoram, grated nutmeg, salt and pepper.

(Continued on page 3, col 3)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION
SUBSCRIPTION 25c PER YEAR

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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Calendar

November 9—Football, Angel Guardian, here.

November 16—Football, Stockbridge Aggie, there.

November 27—Graduation and Alumni Banquet and Dance.

November 29—Thanksgiving.

Dear Graduates and Alumni

I am writing this as president of the Alumni Association to extend to you my wish to see you all present at this year's Alumni banquet and dance. Some of you have not been back since you graduated and I know that you will miss a great treat if you don't come this year. The class of 1924 will hold its 10th reunion and is planning on "big doings." So what do you say folks? Let's all plan now to get back and renew old acquaintances.

The alumni meeting and banquet will be held in the girls' school at 6 P. M. and the dance in the boys' school immediately after the banquet. The date will be Tuesday, November 27.

Don't fail to come.

In all sincerity,

Leslie Wagland, '24

Alumni Notes

On October 3rd, Rose Noonan, class of 1931, received her diploma from the Faulkner Hospital school of nursing, Jamaica Plain. She has been accepted as a student in Operating Room Technique and Surgical Nursing at John Hopkins in Baltimore, Maryland, which courses she will pursue in June. Until then she will be on duty at the Faulkner Hospital.

Helen Ehrlich, class of 1934, is completing her hospital project at the George Washington University Hospital, Washington, D. C. While there her duties have consisted largely of preparing special diets for diabetic patients.

Eileen Finch, class of 1933, of Marblehead, is employed as a household assistant in Newton Center.

Virginia Townsend, Saugus, and Ruth Covell of Andover, both of the class of 1934, are assistants this year in the School foods laboratory. Corinne Stewart of Gloucester, class of 1934, has accepted an assistant's position in the School's clothing laboratory.

Marion Birch, class of 1934, is employed at "Blaney's" in Swampscott.

Madeline Featherstone, class of 1934, has been appointed to the teaching staff in one of the Wenham schools.

Word has been received that Vera Dixon, class of 1934, is employed as a household assistant in Lowell.

A son was born on September 26, to Mr. and Mrs. Ralph Broughton (Elvira Belcher, a former student in the homemaking department). Mr. Broughton is a member of this year's graduating class in the agricultural department.

Dorothy McDermott, class of 1934, is fulfilling the duties of household assistant at the Essex Sanatorium colony.

Frances Whitely, class of 1934, is assisting in the Essex Sanatorium laboratory kitchen.

Virginia Kelliher of the class of 1934, is in training at the Beverly Hospital.

Margaret Bond, class of 1932, has graduated from the North Shore Babies Hospital. She is now employed at 512 Beacon St., Boston.

It has just been learned that in October, 1932, Charles Cook, class of 1931, married Miss Marjorie Rowe, formerly a registered nurse at the Ottawa Civic Hospital. Mr. and Mrs. Cook are living at 340 Main St., Wakefield.

Henry Ellis, class of 1927, is manager of a flourishing creamery in Norwichtown, Conn.

Alfred Cipolla, class of 1933, has been working in the School garden on the Newburyport turnpike, since early in October.

Jack Sturtevant, class of 1930, is playing quarter-back on the Massachusetts State College football squad this year. He and Carl Swanson, class of 1932, are both defraying their college expenses by waiting on table.

News of the School At a Glance

Annual awards offered to students in the Homemaking School for their summer work have been announced, and go to the following girls:

Clothing awards: Juniors: First, Margery Steeves and Dorothy Thorn, Second, Roberta Thompson, Third, Genevieve Pasquale.

Seniors: First, Grace Pramas, Second, Irene Burbeck, Third, Vera Dickson.

Food awards: Seniors: First, Elsie Hamilton, Second, Betty Cole, Third, Dorothy Lowe, Honorable Mention, Marie Brinley and Marion Gagne. Juniors: First, Rita Pasquale, Second, Clare Dooley, Third, Doris Cooke; Freshmen: First, Phyllis Thompson, Second, Dorothy Steeves, Third, Marjorie Hudson. High School Special clothing awards: First, Agnes Cooper, Second, Josie Sheldon, Third, Janet McCrone.

Paul Kruschwitz Shows

How To Reduce Living Expenses

Paul Kruschwitz of North Andover, Massachusetts has used his farm woodland to reduce materially his operating expenses during the last twenty years. He owns a 44-acre farm, 15 open acres consisting of pasture and cultivated land; the remaining 29 acres covered with some forest growth. Mr. Kruschwitz has planted parts of it that have been burned to pine and spruce. The woodlot now consists of a young growth of pine and hardwoods. His annual cut is twelve cords of wood, weeds and undesirable trees. He has cut this on a systematic basis,—that is, he has cut over a section one year, and the adjoining piece the following year, with the result that his woodlot is steadily improving.

How has he cut his running expenses?

Here are the figures: 12 cords of wood cut and used annually. Cordwood of that quality on the market sells for \$8 a cord, so it is worth \$96. Over a period of twenty years this amounts to \$1920. The time spent in cutting this wood, hauling to the house and preparing it for use is done at odd moments, so that no extra expense has been entailed. \$1920—saved by cleaning up the Farm Woodlot.

NOVEMBER 27—

GRADUATION AND ALUMNI
BANQUET AND DANCE

Merrimac Transient Bureau Resourceful Organization

On July 8, three-quarters of an acre on the property of the Merrimac Transient Center, located just outside of Lawrence, was planted to potatoes, turnips, beans, celery, beets, spinach, and chard.

On October 16 a yield of thirty-two bushels of potatoes had sprung from the two bushels planted. This is a fair example of the total vegetable yield. A head farmer, advised by E. E. Metcalf, an instructor at this School, and assisted by members of the "transient family" were aids in making the production a satisfactory one.

Directed by Miss Myra Church, an energetic and loyal worker in Lawrence organizations, the Merrimac Transient Service is a progressive and successful foundation. It is commendable in that it recognizes the importance of self-respect among those people who are accepting aid.

The World war barracks in Lawrence are headquarters for this particular transient center. Transients from twenty-nine states including California, Oklahoma, and Southern and New England states are now being given shelter and assistance here. Many of them, mechanical engineers, have been employed at the barracks, enlarging the quarters which were originally the stables. Here, in long rooms heated by jungle barrels, the transients now have their recreation, dining, and sleeping facilities.

It is the hope of those interested in this branch of welfare that the Merrimac district will be able to house all of its transients at the barracks until they are sent out to the transient camps.

4-H Dramatics Over WBZ

Dramatic stars of 4-H club work will have an active part in the Massachusetts 4-H radio programs presented each Saturday over WBZ. Most of the 4-H radio programs planned for the winter months will include a dramatic sketch, portraying some phase of 4-H club work, with 4-H boys and girls as the actors.

In addition to the dramatizations, George L. Farley, known as "Uncle George" to thousands of 4-H club members over New England, will return to the 4-H programs each week for what he terms "a friendly chat with 4-H boys and girls." Mr. Farley has conducted 4-H radio programs for several years. His voice has been heard occasionally during the past spring and summer, and in response to the insistence of boys and girls throughout Massachusetts he has agreed to take part in the program each Saturday at noon during the winter.

New Law On Sale of Poultry

Effective September 12th, 1934, an Act to license poultry dealers who go about buying, selling and transporting poultry went into effect. Any person regularly engaged in this business must have a license (fee of \$2.00) which he may procure from the Commissioner of Agriculture, State House, Boston. Any person transporting upon public highway or road, live poultry which he has purchased from another must have a bill of sale showing: name of seller, his address, date of sale, breed of poultry, weight, price, number purchased.

Merchants who do not go about from place to place buying poultry, and producers themselves are exempt from the provisions of this Act.

To secure a license the poultry dealer must secure an application blank from room 138, State House. The license when secured shall be affixed to the vehicle and must describe the vehicle. Such license lasts one year from the date of issue. Poultry men should report to their dealers the necessity of their securing such licenses and should furnish such dealers with bills of sale when they sell poultry to such dealers.

F. C. Smith,
County Agent

INTERIOR DECORATION

(Continued from page 1)

will be made to help develop taste through seeing papers of good design. Floor coverings offer a good study in identification. Then what course in Interior Decoration would be complete without considering curtains? Actually making curtains is the only way to really gain confidence in this part of the work, but as this is not usually practical for all, samples will be studied to find different types of attractive window curtaining.

Lighting, pictures and accessories are too important to be left as a casual afterthought. In fact they are so important as to make or mar a room, and really furnish the personality, attractive or otherwise, which a room offers. Actual pictures and accessories will be studied, supplemented by illustrations from magazines.

Margaret R. Harris

Indoor Decorations

Berried shrubs can still be found which will make attractive indoor decorations, for the next two or three weeks. The bitter-sweet, European highbush cranberry, and the fruit of the flowering apple, are some of the many materials available. These can be used for indoor decorations in any heavy grey or brown container.

Radio Health Programs

The Massachusetts Department of Public Health is disseminating health messages and reviews through the courtesies of Stations WBZ at 4.30 P. M. on Wednesdays, WEEL at 1.30 P. M. on Tuesdays, and WEEL at 5.00 P. M. on Fridays.

During November and December the health topics will include: prenatal care, anemia and its treatment, first aid, protecting the school child from fatigue and strain, abdominal pains, how surgery advances, angina pectoris and arthritis.

In the historical sketches programs on Tuesdays over WEEL, Miss Eleanor J. MacDonald, A. B., will discuss the following topics: The Report of 1850, The Report of 1850 Continued, The 1869 Board of Health and Vital Statistics, The State Board of Health, Lunacy and Charity and the Reestablishment of the State Board of Health, Massachusetts Department of Public Health, Water, Methods of Obtaining a Pure Water Supply, Pure Water and Filtration.

Labelling Plants

If you have choice garden plants, the names of which you wish to know and keep on record, labelling at this season of the year is a necessary precaution. The ordinary white pine garden label $\frac{3}{4}$ " wide and about 8" long is one of the most satisfactory labels for general use for this purpose. Use a soft lead pencil for writing and after the label has been correctly filled out place it firmly alongside of the plant. Do not be afraid of getting the label in too deeply. It is bound to have out during the winter and if it is down three or four inches the chances of its staying are much better than otherwise. In this way the identity of your favorite garden plants may be accurately maintained and varieties of plants such as tulips, are readily at hand for reference in the spring of the year. Nothing classifies a gardener so much as his ability to know the names or to find the labels giving the names of his plants. For that reason anyone gardening should plan to use a definite system of labelling.

A. M. Davis

HERBS

(Continued from page 1)

Season the cutlets with salt and pepper, dip in egg, roll in the seasoned bread crumbs, and wrap each one in paper which has been buttered, and broil for fifteen minutes. Remove the cutlets from paper, garnish with broiled or saute mushroom caps and parsley. Serve with mushroom sauce.

In Mrs. Fox's book there are many equally alluring dishes which will goad the herb grower's interest.

Meeting of Advisory Council

The Advisory Council of the women's division of the extension department held its first fall meeting at the Essex County Agricultural School on October 9.

Reports and plans were discussed by the group. Mrs. Felix Carr of Peabody related value she received from her attendance at the summer session held in Amherst under the extension specialists.

Mrs. Mary Roundy, R. N., home nursing instructor, reported on her summer work at Fitchburg and the home nursing groups already started in this county.

Mrs. Mary M. McIntire, Home Demonstration Agent, proposed a plan by which the courses to be offered this year in Essex County would reach the people for whom they are intended.

Members of the Council who were present, included: Mrs. Hazen K. Richardson, Middleton; Mrs. George Mitchell, Groveland; Mrs. John H. Henderson, Andover; Mrs. Felix Carr, Peabody; Mrs. E. Robert Little, Boxford; Mrs. Franklin Robblee, Salisbury; Miss Marion Parker, Beverly; and Miss Verna Payson, State Department of Education.

Best Foods Need Not Be Expensive

Milk, vegetables, and grain are the basis of a nutritional meal according to May E. Foley, extension nutritionist of the Massachusetts State College. If strict economy is necessary in family meals, such foods as sugars, fats, and expensive meats should be cut down in the diet.

Eggs, fruits and vegetables, which are rich in vitamins and minerals, will protect the body against disease and improper functioning.

Whole grains are nourishing, as are dried beans and peas, which may be used in many ways.

Potatoes continue to be the least expensive of vegetables, although canned tomatoes, cabbage, carrots, turnips, onions and squashes are all reasonably priced and should be included liberally in the family's meals.

White eggs are just as nourishing as brown ones and are much less expensive.

Cheese may be substituted for meat occasionally.

A pamphlet entitled "Spending the Food Money", prepared by Miss Foley, may be had for the asking at the Extension Service, Massachusetts State College, Amherst.

Extension News

Mrs. Mary M. McIntire and Mrs. Mary E. Roundy of the Extension Department, attended the twenty-fifth anniversary of the New England Home Economics Association in Boston on the ninth of October and the Health Council Meeting held at the Teacher's College, Salem, on the fifteenth.

Home Nursing groups are meeting under the supervision of Mrs. Roundy, in Haverhill (Gale Hospital), Groveland, Salisbury, and Hathorne at the Agricultural School. The total attendance approaches eighty.

Clothing groups are being held in Merrimack at the Pilgrim Parish House on Fridays, in Newburyport at the Y. W. C. A. on Thursdays, and in Haverhill at 1104 River Road on Wednesdays.

Two groups are meeting under the leadership of state specialties at the Agricultural School to study home accounts and the value of planning one's time.

Nutrition groups for mothers of camp children are being formed by Miss Rae Kauffer of the Essex County Health Association. These classes are to start the latter part of the month.

Cleaning Time In The Garden

Fall house cleaning in the garden is probably more essential than spring house cleaning in the home. Cleaning up all of the garden refuse at this season of the year, burning it and thus destroying hiding places of insects will do more to control pests next spring than a great deal of spraying and dusting. The garden area should be carefully gone over and stocks cut off, piled up to dry out, leafy materials thrown on the compost heap as they are cleaned, roots such as carrots and beets should be dug and stored in the cellar. A fire, for which I suggest that a permit be procured, if you live in an area where that is necessary, will if carefully tended burn up all of the green vegetative unwanted material. The whole area should be raked over and, if possible, plowed and spaded this fall. You will find that the garden will be in much better condition for spring work if spading can be done at this season of the year. It eliminates many insect pests, and particularly the European Corn Borer and the Mexican Bean Beetle. I regret that I cannot guarantee that this will mean freedom from pests both in flowers and vegetables but can only say that evidence indicates that it will help out materially in preventing the spread of these pests.

A. M. Davis,
Extension Horticulturist

Golden Gleam Nasturtiums As House Plants

Last winter I saw several plants of Golden Gleam nasturtiums which were brought indoors and which were thriving as house plants. The practice in each case was practically the same. In the fall of the year the plant was dug up and pruned back to about six inches of stock. Then it was potted up in a fairly large container in a good potting soil and one which contains some plant food in the form of bone meal or old well rotted manure and one which is not too heavy. The plants were brought indoors, watered and treated as any house plant. Within a week leaves start to develop, then stocks and then the nasturtium may be trained around a window. If you are planning to grow nasturtiums indoors I suggest that you take a window which has a sunny southern exposure, if possible, and one which will have a storm window to protect the plants from the winter's frost. This particular plant seems to thrive in locations of this type and can be depended upon for unusual flowering results during the winter season.

Arnold M. Davis,
Extension Horticulturist

The Care of Newly Planted Trees and Shrubs

If you have made plantings of trees and shrubs, especially evergreens and particularly Rhododendrons, one of the best precautions which you can take to bring these plants safely through the winter is to mulch them thoroughly with old leaves and see that they have been thoroughly watered down. If we have plenty of rain you will not need to apply water. If, however, we should have a dry fall a good application of water will do more to bring these plants safely through the winter than will any other type of protection. The best way to apply water to planting beds is to place the hose on the ground and let the water run until the earth is saturated to a depth of about 10". If this is done every 10 days or two weeks, the plants will go into the winter in a soil, which from the standpoint of moisture, is favorably adapted to a successful wintering and the plants themselves are in a condition to which they are best suited.

Arnold M. Davis

THE MCINTOSH FAMILY (Continued from page 1)

Central Experimental Farms at Ottawa. The School will be glad to furnish scions of Joyce for grafting in March and April insofar as we are able to supply them.

TUESDAY, NOV. 27

29th ANNUAL

GRADUATION

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 15

NATHORNE, MASS., NOVEMBER, 1934

NO. 11

Science Day

An event which has come to be anticipated annually at this School is Science Day, held this year on November 23rd.

The guest speaker, Mr. C. W. Johnson of Springfield, whose work in the field of colored photography of wild flowers has gained him many admirers, divulged many interesting as well as valuable scientific facts which one would do well to heed. Primary among these was a caution against eliminating from this state the state's own flower: trailing arbutus, when with little trouble at all arbutus can be rooted and cultivated in one's own garden in an acid soil (preferably under the needles of a pine tree).

Interesting among the tales of wild flower characteristics was that of the "fly trap", a case where (quite contrary to custom) the vegetable kingdom lives on the animal kingdom. This flower literally catches flies and having caught them, smothers them with its petals which close tightly, and hence derives nourishment.

Sixty-five student exhibits, the largest and finest display since the innovation of Science Day in 1925, revealed an inherent interest on the part of the exhibitors in unearthing the rhyme and reason for scientific actions which are related particularly to agriculture.

Prizes were awarded to the following students:

Class I—Plant Reproduction: first prize to Charles Donovan, Saugus; second, Anthony Dichirico, Swampscott; third, Stanley Prophet, Haverhill.

Class II—Insects and Diseases in Relation to Agriculture: first, Rene Deloge, North Andover, second, Leonard Briody, Beverly, third, Archie Nimmo, Methuen.

Class III—Lime and Fertilizer: first, John Fullington, Peabody, second, Eileen Stuart, Danvers; third, James Nicoll, Andover.

Class IV—Poultry Science: first, Gilbert Freeman, Beverly, second, Lawrence Shanks, Essex; third, John Underwood, West Peabody.

Class V—Herbariums (Ornamentals first, Alfred Caproni, Lynn; second, Alfred Caproni; third, Ruth Fairweather, Andover.

Class VI—Herbariums (Wild Flowers, Mosses, Weeds and Tree Leaves) first, Louis Rosi, Middleton; second, Myron Eastwood, Methuen; third, Russell Hurd, Lynn.

Class VII—Feeds and Feed Ingredients: first, Earle Ellis, Lynn; sec-

(Continued on column 3)

We Thank God

By Philip Jerome Cleveland

We thank Gor for the things that never fail;

The sure, great things of his we have always—

The spring and fall, green hills, swift mountain rills,

The health and glamour of the winter days.

We shall march steadfast on so long as suns

And moons shall smile for us out of the vast;

We shall not moan for things man's hate has lost;

God's stars shall yield their beauty to the last!

Men do not know bereavement who can keep

Through all of life the splendor of the sky,

Soft moonlight on the bay, ferns in the dawn,

The sons of meadow larks when dusk is nigh.

We have God's company, the lilies gold

Against the moon, the white flocks on the steep

Where burning bushes yield us still his voice

And souls are shaken from their stupid sleep.

For all the wonder-things that never fail—

God's thousand gifts to men, each night and day,

By which men live—his treasure hid in field

And flower, we give him all our hearts today!

Colorful Cones For The Fire

Christmas cones for the fire are even more gay than they sound! Chemically dipped, they cause brightly colored flames to effuse from the hearth.

Strontium nitrate, giving a reddish color to the flame, and copper chloride (green), have been recommended as producing the best results. However, barium nitrate will produce blue colors, and a fire lacking in blues is hard to fancy!—; orange is yielded from calcium chloride, and lithium chloride gives a purple hue.

The chemicals (which may be purchased at drug stores) should be dissolved in the proportions of one pound to a gallon of water in a wooden pail

(Continued on page 2)

Prize Winners For 1934

On November 27, at Graduation exercises, Melville G. Grey, a Trustee of the School, presented the following awards:

The R. S. Bauer Awards for Excellence in Agricultural Projects:

First, Howard Stults, Ipswich \$20.00
Second, Ruth Fairweather, Andover \$10.00.

Third, Alfred Caproni, Lynn \$10.00.

Fourth, Theodore Smolak, N. Andover, \$5.00.

Fifth, B. Franklin Edwards, Beverly \$5.00.

The Mrs. R. S. Bauer Awards for Excellence in Homemaking Projects: First, Victoria Townsend, Saugus \$20.00.

Second, Mary Peterson, Salem \$10.00.

Third, Corinne Stuart, Gloucester \$10.00.

Fourth, Eleanor Tucker, Gloucester \$5.00.

Fifth, Dorothy Lewis, Andover \$5.00

Alumni Association Awards for Greatest Improvement in Academic Work:

Homemaking, Dorothy FeDermott, Danvers.

Agricultural, Henry Richardson, Lawrence.

Abraham Krasher Medals for Excellence in English:

Homemaking, Helen Erhlick, Methuen.

Agricultural, Virginia Larrabee, Beverly.

Balfour Plaque for Scholarship, Loyalty and Achievement:

Homemaking, Irene Burbeck, Salem.

Agricultural, Chester Ellis, Lynn.

Following are the committees who judged the prize-winners:

The Mrs. R. S. Bauer Awards: Mrs. J. Asbury Pitman, Salem; Mrs. Edwin K. Hayden, Saugus; and Mrs. George E. Hodsdon, Gloucester.

The R. S. Bauer Awards: Mr. Archer L. Pierce, Peabody; Mr. Conrad Tronerud, Topsfield; and Mr. William Carlton, Danvers.

ond, Stanley Lane, Gloucester; third, Bayard Winter, Winthrop.

Class VII—Wood Collections: first, Norman Peatman, Andover; second, Clinton Spencer, Ipswich; third, John Wilcox, North Andover.

Unclassified: first, Ernest Tarbox, Saugus; second, Andrew Bye, Lawrence; third, Archie Buder, Lawrence.

Unclassified (with remote Agricultural relationships)—first, John Marshall, Danvers; second, William Moore Salisbury; third, Thomas Kenney, Middleton.

Class IX—Hobbies: first, William Howard, Lynn; second, Albert Bat-

(Continued on page 2)

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Secretary, Warren Blake	Peabody
Treasurer, Harley Tyler	Middleton
Essex Agricultural Society	
President, Edward Wiglesworth	Topsfield
Secretary, Ralph Gaskell	Topsfield
Treasurer, Thomas Saunders	Topsfield
Essex County Poultry Association	
President, Albert Eiwell	Byfield
Secretary, J. Stanley Bennett	Hathorne
Treasurer, Ellery Metcalf	Saugus
Essex County Rabbit Breeders' Association	
President, D. R. Pinkham	Lynn
Secretary, Helen Wales	Beverly
Treasurer, Ned Harris	Ipswich
Northern Essex Beekeepers' Society	
President, Thomas Smith	Methuen
Secretary, Stephen Dyer	Lawrence
Eastern Massachusetts Society of Beekeepers	
President, George A. Meigs	Hathorne
Secretary, Frank H. Coville	North Andover

COLORFUL CONES

((Continued from page 1))

or earthen crock. (The chemicals will eat metal containers.) Use a wooden basket, porous bag, or similar container to dip the cones in the solution. When the cones have been removed they should drain and be spread on paper to dry over night.

Red tarleton bags will be the happy containers of these hidden colors!

Another method for coloring the cones has been suggested. Paraffin wax is melted and poured lightly over the cones spread on paper. Before it hardens, the chemical is sifted, through a large salt shaker, onto the cones. This salt will adhere to them and when burned produces a pleasant effect.

SCIENCE DAY

((Continued from page 1))

chelder, Andover; third, Rosario Richards, Salem.

Freshmen class prizes were awarded to Norman Peatman, first; John Marshall, second; and John Wilcox, third. Sophomores receiving awards were: Gilbert Freeman, first; Louis Rosi, second, and John Fullington, third. Junior class awards were made to Charles Donovan, first; Ernest Tarbox, second; and Lawrence Shanks, third. Rene Deloge of the Senior class placed first; Earle Ellis, second, and Alfred Caproni, third.

Winner of the sweepstakes prize, a

Alumni Notes

Helen Erhlick, of this year's graduating class, and who has recently completed her training at the George Washington University Hospital at Washington, D. C., is employed in Washington as a nursery governess.

Richard Porier, class of 1933, is specializing in market gardening.

Word has been received that on November 3, Miss Pauline Estelle Wilcox married William Russell Chase, class of 1932.

Richard Murray, class of 1923, has become a successful cattle auctioneer.

Sidney Batchelder, class of 1932, has recently returned from a five weeks' trip to California by motorcycle. He is now employed on an estate in Andover.

Genevieve Kusek, a former student, and a graduate of the Union Hospital, Lynn, is working on private duty.

David Carter, class of 1933, is caretaker and gardener on a private estate in Gloucester.

John Kachadorian, class of 1932, having graduated later from Stockbridge School of Agriculture in Amherst, was appointed, on June 6, inspector with the railroad perishable inspection agency in Philadelphia.

Among the many faces seen at the alumni dance on November 27, were those of Parker Ryan, John Sullivan, James Curran, Leslie Wagland, Evelyn Sawyer Ferrin, Harold Wilson, Brooks Dwyer, and Maynard Brown, all of the class of 1924; Merrit Blake, '32, Dorothy Lewis, '34, Roger Lewis, '25, Kathryn Ingoldsky, '32, Arlene Pikerton, Janet Brander, May Long, Margaret Gordon, Julia Bruce, Mildred Roberts, Marie Murray, Betty O'Brien, Pauline Bozek, Abbot Batchelder, Helen Trow, Lois Brander, Grace Torson Ireland, Nela Bourdelais, Rose Sacco, Elvira Belcher Broughton, Mary Thomas, Betty Akery, Helen Andrews, Mildred Russell, Kenmore Griffin, Elizabeth Matheson, William Costley, Eileen Linehan, Robert Bolcome, David Carter, Howard Stultz, William Tinsch, Eric Peterson, and John Kachadorian.

Honor Roll

The following girls in the home-making school are on the first term honor roll:

High School Specials: Elnora Covell, Lynn; Margaret Foss, Danvers; Patience Kruschwitz, North Andover; Hazel Ogden, Newburyport; Irene Burbeck, Salem.

Seniors: Betty Cole, Boxford; Genevieve Pasquale, Lynn.

Juniors: Agnes Burke, Methuen; Mildred Humphreys, North Andover; Rita Pasquale, Lynn; Frieda Peterson, Newbury; Arlene White, Newburyport.

Freshmen: Barbara Gioco, North Andover; Yolanda Scamperino, Lawrence; Lena Tela, Lawrence.

gold medal, was Rene Deloge of North Andover.

Essex Judging Teams Win Honors

Honor has recently been bestowed on judging teams, and individuals, of this School. On November 9 and 10 four teams judging flowers, milk, fruit and vegetables placed high, against many competitors.

The Essex floriculture team, comprised of Dora Winchester, Saugus; Lucille Legasse, Haverhill; and Mildred Hills, Rowley; won first place. Miss Winchester and Miss Legasse were first and second individual winners, respectively.

The Essex milk judging team likewise placed first, with Edward Besson of Lynn and Arthur Pentilla, Peabody, placing first and third respectively.

Competing against fourteen teams the Essex fruit team won second place, Philip Hanson of Lynn placed third individual.

Forrest Haynes, Haverhill; Charles Clinch, Swampscott; and John Marshall, Danvers, comprised the vegetable judging team which took fourth place.

The Hotbed

This is the best season of the year to repair hotbeds for next spring's use. Sashes should also be restored, painted or puttied if necessary, and put in the tool shed or cellar.

Time To Plant Tulips

Tulips should all be in the ground by the end of November although it is generally unnecessary to put on winter protection until after Christmas. In planting them, a good amount of old, well-rotted manure or bone meal thoroughly worked into the soil will insure good results in the spring.

Christmas Puddings

Pennsylvania Plum Pudding

Mix all ingredients together. Steam three hours. An orange sauce makes an excellent accompaniment for cooked plum puddings.

1 cupful suet	1 cupful raisins
1 cupful molasses	½ cupful sugar
2½ cupfuls flour	
1 teaspoonful cinnamon	
1 teaspoonful allspice	
½ teaspoonful nutmeg	
1 teaspoon soda	
1 cupful sweet milk	

Orange Sauce

1 cupful sugar	¼ teaspoonful salt
4 tablespoons cornstarch	
Juice of 3 lemons, strained	
Juice of 3 oranges, strained	
Grated rind of two lemons	
2 cupfuls boiling water	

Mix sugar, salt, cornstarch. Moisten. Add boiling water. Stir and cook until thick. Add fruit juices and rind. This may be made ahead of time and reheated in double boiler when needed.

CALENDAR

Dec. 19. School closes for Christmas recess.

Apple Growers Need To Pay Attention To Color To Make Fruit Grade High

Massachusetts apple growers need to pay more attention to developing good color on their fruit, as well as controlling pests, if they want more of the apples to grade as "Fancy." This is a conclusion reached by W. H. Thies, extension horticulturist of the Massachusetts State College, after an inspection of Massachusetts fruit which took him into more than 120 orchards during the harvest season this fall. In each orchard, Mr. Thies, usually accompanied by a county agricultural agent, examined a sample of fruit which the grower had picked, and graded it in much the same manner as it should be graded for market. Then he re-examined the fruit to find out the things which prevented its being graded as "Fancy."

In 70 out of the 122 samples examined, lack of color was either first or second in importance in causing the fruit to rate below the top grade. The standard for "Fancy" grade requires each apple to have at least 33 per cent good color, typical of the variety.

Insects, too, were important factors in keeping the apples out of the "Fancy" class, injury by curculio, codling moth, apple maggot and other insect pests being the principal cause in approximately half the samples. Apple scab, frequently a serious problem, apparently was well controlled by most growers' spray programs.

Massachusetts apples, Mr. Thies contends, will develop unusually good color under proper conditions of growth. More attention should be given, he believes, to some of the things which will produce better color in the fruit, such as thinning the fruit, removing trees where they are too crowded in the orchard, picking the fruit late enough to get full color, and planning fertilization and cultivation so the trees get plenty of nitrogen early in the season, but without prolonging growth too late. Late growth, he explains, seems to prevent the development of proper color in the fruit.

At the same time, the State College man re-emphasizes the need for a program to control pests of all kinds, through spraying at the proper times and with the proper equipment and materials.

Short Courses At Amherst

Short courses in dairy bacteriology, dairy manufactures, beekeeping, practical horticulture and vegetable gardening will be offered at the Massachusetts State College later this winter. Those who are interested in the dates or any further information may write to the Director of Short Courses, M. S. C., Amherst.

Hens Work Overtime Lay Eggs With Double Yolks; Richer In Food

State College hens have been working overtime this fall and have laid so many double-yolked eggs that the college is offering eggs of this type for sale by the dozen. A number of poultrymen over Massachusetts have found that their hens too have been producing double-yolked eggs on rather large scale, so they have been able to offer them for sale.

"An egg with two yolks is an abnormal egg," says Professor J. C. Graham, head of the poultry department of the Massachusetts State College. "In flocks which are highly bred for egg production, during the early fall months, when the pullets first start to lay, their egg manufacturing organs are not properly synchronized, so that yolks may be produced more rapidly than whites, membranes, and shells. As a result, two yolks may be enclosed, sometimes, within the same egg. After the birds have been laying for some time, however, this tendency to produce double-yolked eggs is lessened."

"Double-yolked eggs, when they are available, usually sell for seven to ten cents above the price of ordinary fresh eggs, but they may weigh from 30 to 36 ounces as compared with an average of about 24 ounces per dozen for ordinary eggs. On this basis, the purchaser gets more eggs for his money by buying double-yolked eggs."

From a nutritional point of view, the double-yolked eggs are even more superior than the weight would indicate, for the extra yolk adds much more food value than the same amount of white. In fact, according to Miss May Foley, nutrition specialist of the college, egg yolk contains more food value per ounce than any other common food.

Why Join the Dairy Herd Improvement Association?

1. It puts a dairyman in direct contact with the County Agricultural Agent and the State Agricultural College through the herd records.

2. It furnishes him with a complete record of his own herd, thereby detecting the unprofitable cow.

3. It enables him to raise a high producing herd, thereby increasing his net profit.

4. It helps him to feed his cows more economically.

5. It gives him a goal to reach, by pointing out the highest individual producers and the highest producing herd by means of the Supervisor's monthly reports to the dairymen in the Association.

Chester Ellis,
Dairy Herd Supervisor,
Essex County

State College Offers Building Plans

Nearly a hundred sets of plans, drawings, and directions for constructing farm buildings and equipment are now available free of charge at the department of agricultural engineering of the Massachusetts State College. W. C. Harrington, extension engineer of the college, has just issued a list of the topics covered by plans and pamphlets of the department.

Most of the plans are intended to be of particular interest to farmers, and they range from a brush burner for orchard men, to a milk house for dairymen, milk can rack, low wagon for hay and ensilage, corn crib, apple storage, and a number of different designs and plans for dairy barns.

Ground plans, however, are included for a baseball field, tennis court, playground ball field, handball court, and several other forms of sport. Plans for roadside stands and for tourist cabins also are included in the scope of the collection.

All these plans for constructing the buildings, equipment, or recreation fields are available free of charge. They may be obtained by writing to the Department of Agricultural Engineering at the Massachusetts State College, at Amherst. A list of these designs has been prepared describing the plans which are available.

Attention—Poultrymen

December is the month to mate up breeders, produce hatchable eggs, buy chicks, keep birds in good condition, test the lighting system, provide good litter, supply green food, and provide shell making material, according to the "American Poultry Journal".

"Although the hatching season is still two or three months away for many flock owners, it is none too early to mate up breeders."

"Far-seeing poultrymen are preparing now to get good hatchable eggs during the hatching season. It has been found that hatchability is considerably improved if the hens can come in contact with the direct rays of the sun to make use of the ultra-violet rays or if they receive some substitute that provides the necessary vitamin D. Special glass that allows the ultra-violet rays to pass through will help the hens to produce strong hatchable eggs, as will the use of either cod liver oil or sardine oil at the rate of one pint per 100 pounds of mash. Milk and greens also help in the production of hatchable eggs."

"One of the best ways to prevent layers from molting out of season and to keep the laying throughout the winter is to keep them in good condition. To do this, one should examine them often."

Be sure to replace burned-out bulbs if the production is to be kept up. "Peat has gained most in popularity, as litter, in the last few years be-

cause of its absorbent qualities which permit it to be kept in the house sometimes an entire year without change."

Extension News

On December 6, Miss Grace B. Gerard, extension specialist, will conclude a series of meetings at this School, dealing with home accounts. In January Miss Gerard will visit homes in Essex County to determine the value of her counsel.

Instruction in the selection of draperies and curtains suitable for the average home will be continued by Miss Gerard on December 14 at the Gloucester community house.

Classes in clothes renovation are being conducted by Mrs. Mary M. McIntire, Home Demonstration Agent, in Merrimac at the Pilgrim Church, in Newburyport at the Y. W. C. A. and in Haverhill at the home of Mrs. Hutchinson, River Road, and at the high School.

Nutrition classes for mothers of camp children have started in Danvers under the supervision of Miss Rae Kauffer, field secretary of the Essex County Tuberculosis Association.

The Home Demonstration Agent attended the annual extension workers' conference at Amherst, November, 26, 27, and 28.

Paper White Narcissus For Christmas

A. M. Davis

If you wish to grow your own flowers for Christmas, paper white narcissus may be depended upon for very satisfactory results. Get good bulbs from any reputable source being sure that they are firm and of good size.

Any bowl which is deep enough to hold one inch or more of pebbles will be satisfactory. There are several inexpensive bowls on the market and old chopping bowls can be used with good results. Metal is satisfactory as is almost any other container. A bowl which is of a brown, grey, or greenish shade is usually more interesting than those of other colors. Fill your chosen container nearly full with small quarter to half-inch pebbles. Other materials such as beach stones, small stones from the yard, trap rock of small sizes, shells, etc., can be used.

The bulbs should be pressed firmly into these pebbles and the pebbles covered with water. All that is necessary is to keep the water over the pebbles. Some people prefer to plant the bulbs in the dark and then bring them out. Others have had excellent results in planting them and watching them develop in a room. Either method should prove very successful. Bulbs to be forced for Christmas should be planted immediately.

Questions and Answers

Question: How does goats' milk compare with cows' milk in nutritive value?

Answer: Goats' milk is a little higher in protein, calcium and phosphorus than cows' milk.

Question: What is the difference between California and Oregon Prunes?

Answer: California prunes, also known as French prunes are sweet and require very little, if any, sugar. Oregon prunes, also known as Italian prunes, are tart and are generally improved by the addition of sugar.

Question: What is the difference between white and dark tunafish?

Answer: There is no difference in the food value and practically no difference in the taste and texture of white and dark tuna. White meat is more expensive than the dark. The light and dark meats come from different varieties of fish.

Question: What is milk bread?

Answer: According to a new government ruling, bread to be labelled "Milk Bread" must have all its liquid in the form of milk. This of course adds considerably to the food value.

Protection For Tender Perennials

Arnold M. Davis

The last winter vividly brought to the attention of gardeners the fact that many of the tender perennials require special protection in order to be safely brought through the winter. The question now is what to do to insure best results for wintering over plants of this type. I believe that the use of a coldframe or hotbed is the most practical method to protect perennials.

The coldframe should be cleared out, the ground spaded up and worked as though you were to plant it. After this is done the clumps of perennials which you are afraid might die during the winter should be carefully lifted, the tops pruned back and then planted firmly in the coldframe. Allow sufficient space so that they are not unduly crowded. After they have been planted a light covering of straw or other fibrous material would be beneficial. This material should not be put on until after the ground has definitely and permanently started to freeze. After the straw has been put on, the coldframe should then be filled with evergreen boughs. In this way there is no question but what the plants will pull through the winter safely. I would suggest that a ditch be dug around the outside of the coldframe to collect and hold any water, thus keeping it away from the crown of the plants.

Future Farmers of America

Mr. J. A. Linke, the National F. F. A. Adviser, intends to come to Mass-

Food Buying

May E. Foley

In the not far distant past, a great many persons, particularly in the more favored walks of life, thought of eating as a pastime or social occasion, and of food as only something to give pleasure and satisfaction.

Now, while the importance of enjoying food is not underrated there is a scientific attitude toward eating as a whole. What are the uses of food in the body and which foods best supply the body needs? How can food be prepared and served so that it will meet these needs to the best advantage? How can three meals each day be planned and prepared with a reasonable expenditure of energy and money? These are questions constantly confronting the thoughtful homemaker of today.

Food has three general uses in the body; primarily to build and repair, secondly to furnish fuel for energy and heat, and finally to regulate body processes.

It has become known quite generally that proteins, minerals and vitamins build and repair; fats, starches and sugars furnish energy; and minerals, vitamins and water regulate.

A guide for spending food money has been devised by Dr. H. C. Sherman of Columbia University, suggesting that the dollars be divided into fifths, one-fifth for milk and cheese, one for fruits and vegetables, one for meat, fish and eggs, one for fats, sugars and miscellaneous products, and one for bread and cereals. This has proved an excellent rule for the family on a moderate income. A guide for the family on a very limited income is this: build the diet around milk, grain products and vegetables, and spend what is left for inexpensive meats and meat substitutes, fats, inexpensive fruits and some sugar.

A weekly, low-cost food supply for a family of two adults and three children, prepared by the Bureau of Home Economics, Washington, D. C. is as follows:

Bread, 12 to 16 pounds; flour, 1 to 2 pounds; cereal, 4 to 6 pounds; whole fresh milk, 23 to 28 quarts; (or evaporated milk 23 to 28 tall cans); potatoes 15 to 20 pounds; dried beans, peas, peanut butter, 1 to 2 pounds; tomatoes, fresh or canned, or citrus fruits, 6 pounds; other vegetables (including some of green or yellow color and inexpensive fruits), 15 to 18 pounds; fats, such as lard, salt pork, bacon, margarine, butter, 2 1-2 pounds; sugar and molasses, 3 pounds; lean meat, fish, cheese and eggs, 5 to 7 pounds; eggs (for children), 8.

achusetts early in December to take up the matter of membership (whether or not girls should be admitted as members of the national organization).

ESSEX FARMER AND HOME MAKER

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VOL. 15

HATHORNE, MASS., DECEMBER 1934

NO. 12

Farm Inventory Week January 7-12, 1935

Have you ever had the experience of applying for a loan at a bank and being turned down? Most loans are does not want to make the loan, but because the average farmer refused not because the banker has no records to use in proving that his requirements for such a loan are sound and based on good business methods.

The farmer who has such record *ἀντιγράφου ἀποδείξει* *ἀξία* *συν* *σπασ* getting financial assistance.

Now here is your opportunity. We are about to start a new year. Why not start with a resolution to get a free farm inventory book, and use it as per instructions?

Here is how a good farm inventory statement can help you. It will:—

1. Show your Net Worth above all debts.
2. Show whether or not you are getting ahead financially and how much.
3. Help to put your farm on a business basis.
4. Provide a valuable list of property in event of fire or in settling estate.
5. Provide information for preparing a Credit Statement.
6. Show how the investment in farm property is distributed.
7. Provide the starting point for any system of farm accounting that may be established.
8. Assist in making out income tax report.

By writing immediately to the County Agent F. C. Smith, Hathorne, you may procure your free book.

Fish Schools

Plans for a series of "Fish schools" are being made by the State Department of Agriculture as part of a comprehensive program to enable more consumers of the state to secure first class fish at reasonable prices.

The courses are open to salesmen in stores where fish is handled. The five courses will include: 1. Approved methods of icing and packing fish; 2. Approved methods of cutting and cleaning; 3. Methods of securing cleanliness behind the counter; 4. Window displays; 5. Wrapping fish and helpful information which should be given consumers.

Another American Tragedy

(Quoted from a pamphlet written by Charles Lathrop Pack, President American Tree Association)



AMERICAN ELM
Courtesy American Tree Assoc.

Millions of America's most beautiful tree, the White Elm, as well as the five other species of elm in the United States, are threatened with death. A plague which may wipe out these elms as completely as another plague wiped out the American Chestnut exists today and is steadily gaining ground. There is no cure for it. The only hope for the elm rests on the possibility of entirely eliminating the plague from the country. The only way to do this is to locate infected trees and completely destroy them. This work is now being conducted with a force so small that it is doubtful if much headway can be made. There is a well founded fear that before adequate forces can be mobilized to fight to save the elm the plague will have spread to such distances that before many years all varieties of the elm in this country will be destroyed.

This is not an exaggerated statement. It is backed by facts acquired by investigations of government scientists who are conducting a fight against the disease. They know what they are talking about. They mean what they say when they declare that much larger co-operative effort is

(continued on page 3, col. 1)

1935 Corn-Hog Program

Under a proposed plan drawn up by the federal agricultural adjustment administration, in 1935 the maximum corn acreage that may be planted is 90 per cent of the average for the two years 1932 and 1933. This figure represents an increase of about one-eighth over the 1934 maximum. Individual signers may hold out of production anywhere from 10 to 30 percent of the two-year base acreage and receive corn benefit payments in proportion, the payments to be 35c a bushel on estimated production of retired acres.

The hog provisions, as proposed, state that the individual contract signer is being asked to hold a number of hogs produced for market from 1935 litters to 90% of the adjusted average number produced from 1932 and 1933 litters, instead of 75% as provided in the 1934 contract. The participating producer will receive a hog adjustment payment of \$15 per head on the number of hogs represented by the 10% adjustment.

It is expected that county and community committees for the educational and sign up campaign on these proposed programs will get underway early in January at which time corn and hog producers in Massachusetts will be enlightened on the various details of the contracts.

F. C. Smith,
County Agent

Open Meeting For Poultry Men

December 28

The question of breeding for stamina and longevity is a very important one; so important that the Poultry department at Massachusetts State College has developed Project No. 3.

This project will be explained by Dr. Hayes and Professor Klein at a meeting to be held at the Essex Agricultural School on Friday, December 28, at 1.30 P. M. Poultrymen and their friends who may be interested in breeding problems are very cordially invited to attend this meeting.

Essex Farmer and Homemaker

HATHORNE, MASS.

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Calendar

- December 26—Nutrition class at the Danvers High School, sponsored by Women's Extension Department—2 P. M.
January 2, 1935—School reopens after Christmas holidays.
January 2—Poultry judging at the Boston Poultry Show
January 9 to 11—Union Agricultural Meetings, Worcester
January 19—Boston Market Gardeners' Meeting at this School.

Alumni Notes

Jack Sturtevant, class of 1930, has been elected 1935 captain of football at Massachusetts State College, Amherst.

Michael Pickovvicz, class of 1932, who visited the school on Friday, December 14, is continuing his agricultural experiences on his father's farm in Billerica.

Announcement has been made of the marriage of Dorothy Lewis, class of 1934, on Thanksgiving day, to Arthur Peatman, also of the class of 1934.

Word has recently been received that Agnes Cooper, class of 1934, was married in June, to Ralph Gleason, of Shirley, Massachusetts.

SEVENTH ANNUAL UNION AGRICULTURAL MEETING

Worcester Memorial
Auditorium

January 9, 10, 11
1935

A final program, giving the schedule of daily events will be furnished upon request after December 25.

Basketball

Following is the basketball schedule to date:

December 28—At Wakefield
January 4—At North Quincy High
January 9—Alumni, here
January 11—Bristol, here
January 16—Wakefield, here
January 18—open
January 23—St. Joseph's Juniorate
January 25—open
January 30—open
February 1—open
February 6—Hamilton, here
February 9—At Melrose
February 13—At Hamilton
February 15—open
February 20—open
February 22—open
February 23—At Stockbridge
February 27—open
March—At Bristol
Manager—John Munroe, Andover

A wooden floor, voted for the gymnasium by the Trustees, is expected to be completed during the Christmas holidays.

Honor Roll

Ernest Thayer of Lynn, Ruth Fairweather, of Andover; Clinton Spencer, Ipswich, Charles Pettengill, Haverhill and Henry Smolak, North Andover top the list of honor students for the first term's work.

The remaining students are: Huntington Howard, Chester Mavros, Henry Cooper, Philip Hamson, Merle Graffam, Elmore Smith, Nicholas Nicholopolous, Frederick Piper, Lynn; Vincent Nelson, Vincent O'Donnell, Warren Kneeland, Woodward Walker, Rosario Richards, Salem; Lawrence Shanks, Gilbert Freeman, Warren Towne, Beverly; Harvey Underwood, Essex, Albert Collins, Eileen Stewart, John Marshall, Danvers; Mildred Luns, Byfield; Ernest Tarbox, Melville Low, Saugus; Theodore Smolak, North Andover; Clayton Teague, Marblehead; Clark Gowen, West Newbury; Warren Hichens, James Webber, James Goodale, Warren Page, Middleton; Franklin Day, Forrest Haynes, Gilbert Wallace, Haverhill; Lewis Norwood, Rockport; Stanley Bickford, Lynnfield; Joseph Blunda, Ipswich; Francis Gillen, Myron Eastwood, Gerard Hamel, Lawrence; Sargent Griffin, Horace Lufkin, Gloucester; Henry Norman, Methuen; David Elwell, Essex; Albert Batchelder, Andover.

Fire Side Reading

Books of travel and adventure have been eagerly read since the days of the ancients. The Marco Polos of all ages have provided keys that open up strange and unfamiliar places, earth's mysterious or unknown corners, amazing adventures in little known places, all of which are a lure to the reader who takes a peep into these unknown regions. All of us cannot travel to all lands, but during the long winter evenings we can sit at our firesides and read of exotic southlands, arctic explorations, modern jungle trails or perhaps first-hand information of the peoples of these lands while our imaginations carry us far away from winter with its ice and snow. Many of our modern writers have veered away, perhaps from the style of the classic travel books of a century ago, but they value human interest as well as fact and have produced fascinating volumes that should appeal to any reader. Choose your book and drift away into these fascinating regions of enticing adventures.

"Between the River and the Hills", by Sisley Huddleston (His home was an old mill and it was there that he settled down to relax). "The Italian Lakes", by W. D. McCracken. (These lakes have a sparkle, a joy, and a freshness all their own.) "Across Iceland" by Olive Chapman: (Do you know this romantic land on the fringe of the Arctic circle?) "Foot-loose in the West" by Charles Finger: (Colorado and California with their deserts, mountains, lakes and national parks.) "The Enchanted Jungle" by Isadore Lhevinne: (A passionate interest in primitive music led the author to trek through the Equador jungle and find an amazing Indian life that exists there. "N by E" by Rockwell Kent: (The author with two companions sailed north by east for Greenland.) "Enchanted Sand" by D. J. Hall: (A motor tour through Arizona and New Mexico that shows an appreciative contact with the Indians in our Southwest.) "By Way of Cape Horn" by A. J. Villiers: (The adventure of a gallant ship in many waters.) "Secret Treasure" by A. H. Verrill: (Undiscovered hoards of treasure in matter-of-fact England.) "What the Butler Winked At" by Eric Horne: (Life in England as one class sees another.) "The Spell of the Rhine" by Frank Fraprie: (See the vine-clad hills and castled crags with the author.) "From Siam to Suez" by James Childers: (Most unusual descriptions of people and their customs in the Orient. Bazaars, dancers and festivals.) "Golden Phoenix" by Princess DerLing: (Phantasy, romance, and intrigue woven about Chinese life and customs of the Imperial Court).

V. L. Clarke

AMERICAN HOME TRAGEDY (Continued from page 1)

urgently necessary for increasing the battle forces and extending the battle lines.

Already a great deal of damage has been done. Already thousands of trees have been destroyed. Already tens of thousands of trees may have been infected with the plague and are doomed to destruction. They must either be destroyed by the disease itself which can then spread to other trees, or upon discovery of the infection must be destroyed by man to prevent this spread.

Here are the facts. The American Elm, majestic for untold ages before the arrival of the Pilgrims, recognized today as our greatest shade tree asset, is doomed to destruction unless the plague is eliminated. Already in parts of New York, New Jersey, and Connecticut, the doomed lists include more than 6500 elms and the death list is growing daily.

June, 1933, is the date which marks the first finding in this area of the fatal Dutch Elm disease, because it was originally discovered in Holland. It is equally deadly and it is attacking another truly great tree of great value, the American Elm. Like the chestnut blight it is caused by a fungus that invades the conducting tissues in the young sap wood of the tree. This invasion results in the plugging of the veins that supply water from the roots to the leaves. As the leaves continue to evaporate water which is not replaced through the veins connecting them with the roots the leaves will wilt. When the stoppage of circulation by the disease is nearly complete, the tree dies. By this time the fungus has invaded all parts of the tree, even the roots, evidently moving swiftly in the sap stream while it is still flowing. A disease of this kind cannot be eradicated overnight and not at all except by persistent effort.

America must decide now whether to attack the enemy with sufficient force to wipe out its camp or to give up to it more precious ground populated with hundreds of valuable elms to every square mile every one of which may be drafted by this enemy as an aid in further invasion and more complete destruction of the invaded countryside. The test of the strength of the invader has now progressed to a point where it is known quite definitely that a larger and better equipped army is immediately essential if victory is to be had by a timely attack of the entire enemy camp. The time to strike a telling blow is at hand.

This is a call to arms for the American Elm, and a warning of the inevitable result if reinforcements are not provided to permit a major offensive against the foe. The forces of the enemy are multiplying every day the attack is delayed.

American citizens, it is for you to decide. One of your priceless possessions is at stake. Will you come to the aid of the American Elm?

Feeding For Winter Egg Production

Investigation and reports from practical poultrymen have indicated a wide range in feeding practices giving equally good results in the hands of the operators, indicating that laying hens are able to adjust themselves to quite a range in protein intake.

For many years the feeding of mash in hoppers and scratch grain in the litter has been widely followed; several years the hopper feeding of hard grain as well as mash was introduced at Massachusetts State College; and within the last two or three years an "all-mash" ration has been offered by some commercial companies.

An unbiased report, showing results from the above three methods of feeding, has been released by the state of Connecticut involving about 60,000 birds in 135 flocks, and covering a twelve months' period. This report above an average of 171,164, and 146 eggs per bird respectively under the three months of feeding, giving the birds under the mash in hopper and scratch in litter method a margin of about one-half dozen eggs over those on the mash and scratch in hoppers, and more than two dozen eggs over those on the all-mash diet.

Most all poultry keepers have noticed a tendency for birds to drop in production following a sudden cold spell. This drop is invariably preceded by a decrease in feed consumption, especially of mash. It has been observed that if the total intake of feed can be maintained that the birds are more likely to hold up in production. The careful feeder will note decreased activity around the mash hopper and take steps to keep up the total intake by increasing the amount of scratch fed, or by employing a wet mash during the period in question. Weighing the feed and watching the weight of the birds to see that they maintain or increase body weight are two advisable steps in holding the production level. A substantial flock of Reds or Rocks will eat from 24 to 30 pounds of total feed per day per 100 birds during cold weather, and the amount of scratch will vary from 12 to 18 pounds per 100 birds, depending upon the feeder, the weight of the birds, the temperature, and the protein level of the mash used.

J. Stanley Bennett

FARMERS AND

HOMEMAKERS'

DAY

MARCH 20, 1935

Massachusetts Farm Outlook For 1935

1. A slight improvement in domestic consumers' purchasing powers is expected for 1935.
2. Because supplies have been greatly reduced, 1935 farm prices will be higher than the prices of 1934.
3. Dairy prices will average higher than last year's. Further increases above present levels are doubtful.
4. Winter and spring egg prices will average higher.
5. Poultry prices are expected to advance further and remain at higher levels during the first half of 1935.
6. Continued higher prices will be received for the 1934 apple crops.
7. The tobacco situation is improving as the supplies are growing less.
8. Potato prices are expected to remain low.
9. A danger of acreage expansion during 1935 tends to foretell lower prices for onions.
10. High food prices will tend to strengthen market garden crops' prices during the first part of 1935.
11. Prices of feeds will remain relatively higher the rest of the season.
12. Fertilizer prices will be no higher during the rest of the season.
13. Prices of building materials may decline during the year.
14. Grass seed prices will remain higher during the first half of the year.
15. Farm machinery prices may advance slightly.
16. Farm wage rates may be slightly higher.
17. Farm credit conditions will be better for several years.
18. The balance of income available in farm family living will show small gains over 1934.

Project Honor Roll 1934

Merit is due those students (some of whom graduated in November) whose project work, involving agricultural experiments, records, accounts, and reports during 1934, was of A quality.

Such students are:

Fred Basile, Richard Colby, Dana Drew, of Haverhill; Edward Bessom, Alfred Caproni, Chester Ellis, Philip Hamson, Ernest Thayer, of Lynn; Leonard Briody, Andrew Bye, Franklin Edwards, Gilbert Freeman, Virginia Larrabee, of Beverly; Ralph Broughton, Kenneth Nolan, of Danvers; Archie Buder of Lawrence; Ruth Fairweather, John Monroe, Andover; Richard Gilman of Rowley; Ernest Tarbox, John Gould, Dora Winchester, Albert Nunan, Kenneth Nunan, of Saugus; Gordon Hall, Ballardvale; Vincent Nelson, Salem; Charles Pettengill, Gilbert Wallace, Bradford; Victor Pohju, Robert Wolcott, George Mosse, of Peabody; Louis Rosi, Middleton; and Howard Stultz, Ipswich.

A Distinction Without A Difference

Many people think that "Economy in the food budget" must seem either a decrease in total food value, or foregoing many items that make appetizing meals.

A careful comparison of the two lists below which consist of common foods found on many family grocery orders each week will assure you that neither course is necessary. The difference in food value in the two lists is negligible. The saving is marked.

I	
7 quarts milk, grade A	\$1.05
7 quarts milk, grade B	.84
1 dozen oranges	.40
10 pounds potatoes, baking	.30
1 head cauliflower	.25
2 bunches carrots	.10
2 pounds peas, fresh	.25
6 loaves bread, fresh	.60
1 box cream of wheat	.23
1 dozen eggs, A, white	.47
1 pound butter, print	.35
1 pound crisco	.18
1 pound liver, calves' liver	.55
1 pound sirloin steak	.45

Total \$6.02

II	
7 quarts milk, grade B	\$.84
8 cans evaporated milk	.46
3 cans tomatoes	.22
10 pounds potatoes, local	.14
1 head cabbage	.08
1 pound carrots	.04
1 can peas	.15
6 loaves bread, day-old	.30
1 box mellow wheat	.17
1 dozen eggs, B, brown	.36
1 pound butter, tub	.32
1 pound lard	.13
1 pound liver, beef	.20
1 pound chuck steak	.25

Total \$3.66

Climbing Roses

There have been numerous requests for information on mulching climbing roses this fall. It might not be out of place to point out again that straw wrapped around tender climbers such as Gardenia, Aviator Bleriot, and perhaps Paul's Scarlet Climber, Dr. Van Fleet, and Silver Moon, which are growing on a support so that it is impossible to lay them on the ground is the best way of protecting these plants. Old burlap bags will do the same but are not as good as straw since they do not have a tendency to shed water. Perhaps the easiest method of protection is to lay the plants on the ground and cover them lightly with straw or leaves, evergreen boughs, or loam. Any of these methods will give you good results so far as pulling climbing roses through the winter is concerned. After the plants have been mulched they should be left alone until next spring.

A. M. Davis

Drainage

There are several bulletins on garden drainage available at the Massachusetts State College, Amherst for the asking.

Agricultural tile, 4" porous tile, laid in any of the approved systems will give good results. Also ditches dug two feet deep and filled with ten inches of soft coal cinders will provide relief.

Inasmuch as the subject of drainage is a comprehensive one, and must apply to a particular location, it is advised that information be sought through the aforementioned bulletins.

Welfare Workers Aided By This School

Nineteen cities and towns have been aided by the homeing students of this School studying child care under Mrs. Mary Roundy, R. N. Toys made in her classes have been sent to Beverly, Boxford, Danvers, Haverhill, Lawrence, Lynn, Medford, Methuen, Nahant, Newburyport, Peabody, Saugus, Salem, Topsfield, Waltham, Westerly and a few out of state towns in New Hampshire, New York, and Nova Scotia.

The toys include stuffed animals, dolls, scrap books, and trays.

Candy, made in nutrition classes, supervised by Miss Ruth Emerson, was sent to the Children's Ward at the Salem Hospital, The Children's Home in Salem, The Deaf and Dumb Home in Danvers, The Danvers Home for the Aged, and the Beverly Health Center. Candy boxes were made by students in the Art Department under Miss Margaret Harris' supervision.

Clothing made in Mrs. Myrtle Dunn's classes has been sent to children in Lynn. The material was supplied by the Lynn Welfare department.

Notice From Federal E. R. A.

The following letter is printed with the authority of the writer:

"To County Agricultural Agents in Massachusetts"

"It has come to our attention that in some counties, unauthorized persons are using the name of the RURAL REHABILITATION DIVISION in obtaining options on land for the purpose of this Division.

This is to advise you that we have not authorized anyone to obtain such options, and further, that if we should decide to do so, we will notify you in advance."

Carl W. Buckler, Director
Rural Rehabilitation Division

Round About The County

During January, Mrs. Mary M. McIntire, Home Demonstration Agent, will devote Mondays to a group at the Essex Sanatorium.

Tuesdays have been set aside for clothing work in the Haverhill High School, with meetings at 1.30 P. M.

On Thursday and Friday, January 10 and 11, and on Thursday, January 17, visits will be made throughout the County by Miss Grace B. Gerard whose course in Home Accounts has recently been completed here.

On Friday, January 18, a meeting dealing with home furnishings will be held in the Community House, Gloucester.

Miss Grace B. Gerard will return to the county in February to repeat her home accounts course for the benefit of those communities which have not yet been able to carry this project. Anyone interested in joining the groups should notify Mrs. Mary M. McIntire immediately.

Mealy Bugs On House Plants

One of the most discouraging pests which exists on house plants is the mealy bug. When young, the insect is not easily noticed but as it becomes mature it covers itself with a fuzzy white coating and is evident. It takes nourishment by sucking the sap of the plant, with the result that when there are a number of them taking food from a plant it will soon die. These insects multiply very rapidly. The problem of how to control this pest is a difficult one for the person who grows house plants. If one has many plants and only one plant is infected, the most practical thing to do is to dispose of the plant by burning it. When the pests are more or less general over the entire crop of plants different control measures must be adopted. Without any question, the most practical way of controlling this pest is to mix together equal parts of denatured alcohol and water, one spoonful of each, for example, and with a camel's hair brush apply this material to each insect. This will kill them, and is about the most practical recommendation where they are quite generally present.

A. M. Davis

FARMERS AND
HOMEMAKERS'
DAY

MARCH 20, 1935

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 16

HATHORNE, MASS., JANUARY, 1935

NO. 1

Farmers To Adjust Production In 1935 Above 1934 Levels

More than three million American farmers, in planning for 1935, will utilize provisions of the Agricultural Adjustment Act for controlled expansion of production above 1934 levels. Using the cooperative procedure made possible by the Act, agriculture will seek to adjust 1935 production to expected demand, replenish livestock, feed and forage supplies severely depleted by the drought, and maintain balanced production of crops in which surpluses have been reduced. Despite the worst drought in history of the country, 1934 brought a billion-dollar increase in the cash income of agriculture over 1933. The farm cash income was \$723,000,000 more in 1933 than in 1932. With adjustment program benefit payments included, the purchasing power per unit of farm commodity was about 80 per cent of prewar in 1934 as compared with 60 percent in 1932. Farmers' net income, after paying production expenses, had a purchasing power of 80 percent of prewar compared with 52 percent in 1932. Estimates indicate that cash farm income for 1934 is 19 per cent higher than last year and 39 percent higher than in 1932. General income data for the country as a whole give a brighter picture of the 1934 situation of farmers than actually exists in some areas where drought forced heavy liquidations of livestock. The receipts of farmers from sales are included in the 1934 income figures, whereas in some of the drought states these sales represent considerable selling off of livestock that is needed for breeding purposes. For some farmers this will mean losses of income until foundation herds can be restored. This situation is compensated for to some extent, however, by the fact that many farmers have sold their cull livestock, and their herds consequently are of a higher average quality for foundation stock than ever before.

"News Digest"

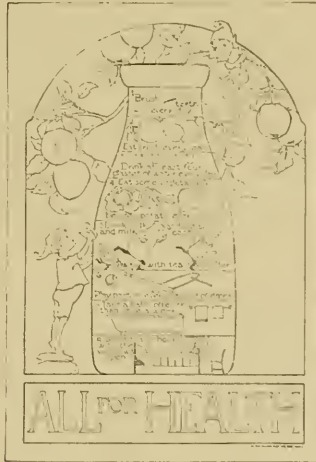
4-H Honors At Boston

The Junior 4-H judging team placed third at the Boston Poultry Show this year. Arthur Spohr placed fourth individual.

The Senior 4-H team, made up of Wendell Stackpole, Richard Clayton, and Russell Gould, won second place. Russell Gould, as fourth individual winner was awarded a ribbon and two dollars.

Milk, Fruit, Cod Liver Oil For Child of Pre-School Age

A quart of milk every day is the first requirement of a diet for a child between the ages of one and five, outlined by Miss May E. Foley, nutrition specialist of the Massachusetts State College. Milk, says Miss Foley, because of its almost perfect balance of proteins, fats, sugars, vitamins, and minerals is the most valuable single food for a young child.



(Courtesy New England Dairy and Food Council, Inc.)

Milk alone, however, is not sufficient to supply all the needs of the growing youngster. He needs meat or meat substitutes occasionally. Until the teeth and jaws are well developed, it may be well to allow him to have only ground meat, although lated, it may be well to allow him to more difficult to chew.

Fish of many different kinds, except for those with small bones, may be used to replace meat. Eggs, which belong in the same class of food as meat and fish, because they are rich in protein, should be given the child several times a week. Five to seven eggs a week is adopted as a standard for the child of pre-school age.

Potatoes are probably the most common of the vegetables which will be given to the child, although at least two other vegetables should be fed each day. One of these vegetables

(Continued on page 3, col 3)

A Capful of Certainities

Plans for duty-free importation of Canadian hay as a measure to alleviate the feed shortage in drought regions of the northwest have been announced by the Agricultural Adjustment Act.

Painting the handles of out-door tools bright orange (good hideous color!) will prevent their being left out on the ground.

In order to simplify the task of taking an inventory, the Massachusetts State College has provided a Farm Inventory Book, which lists most of the items likely to be included in an inventory of a Massachusetts farm. The book is being distributed by county agricultural agents, or may be obtained free of charge from the Extension Service of the Massachusetts State College at Amherst.

"Degrees" will be awarded to fish salesmen attending piscatory schools in Massachusetts where they will secure the latest information on icing and packing, cutting and cleaning, displaying and wrapping, and selling fish.

"I Can't Afford Good Cows"

The writer made a study of the herds of the Essex County Dairy Herd Improvement Association, and found that:

Cows which averaged a cost of \$66 produced 2191 quarts of milk per year valued at \$131. The feed cost was \$104. The interest, taxes and depreciation on the cow amounted to \$13 and the producer profited but \$14.

Cows which averaged a cost of \$131 each produced 3706 quarts valued at \$222 at the farm. The feed cost was \$132, and overhead \$28, leaving the farmer \$62.

Yet Cornell bulletin No. 562 entitled "Success in the Management of Dairy Farms" indicates that high production of milk per man is dependent upon a large number of high producing cows with each man. The number of cows kept per man is more important than the production per cow in determining the output per man.

The production of three 40-quart cans of milk daily per man is essential for profitable production where milk is the sole income. This might mean the production of thirteen cows, or nine, preferably nine.

F. C. Smith

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION
SUBSCRIPTION 25c PER YEAR

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Calendar

January 23—Dairy short course graduation—exercises at the School (evening).

January 25—Senior dance.

January 25—Close of second term in both agricultural and homemaking departments.

February 7—Girls' basketball at Rockport.

February 9—Basketball game at Melrose.

February 19—Girls' basketball at the School, vs. Manchester.

March 20—Farmers' and Homemakers' Day at this School.

"New Frontiers"

By Henry A. Wallace

"New Frontiers" has been called "an enlightening exposition of the nation's affairs, and a challenge to its spirit to march on to that fairer new world which is in the making."

But more than that, it is a book written by a man who understands that the problems of any country are based on spiritual inconsistencies, and that "material issues are important only insofar as they yield to the basic question of what one really wants to do with one's life."

It is a book to be read by those who want to see ahead, by seeing back.

21ST ANNUAL FARMERS' AND HOMEMAKERS' DAY WEDNESDAY, MARCH 20, 1935

The Trustees have voted to hold another Annual Farmers' and Homemakers' Day. This will be managed by a Committee of citizens with Trustee Grey of the Board of Chairman. Announcement will be made of the plans as soon as they are completed. It is proposed to have a large and attractive trade exhibit as formerly. Trade exhibitors have been good, sustaining patrons of this event. Some new features are contemplated this year. As usual, committees from the School staff are already at work perfecting plans for this event.

In Prospect

On February 14, Miss Vera Griffin, Field Secretary of the Essex County Health Association, will speak to the girls in the homemaking department on the subject of the Essex County Tuberculosis Prevention Camp, its aim and its benefits.

On February 21, the student Home Economics Club will present a joint-assembly program which will be followed by dancing.

Honors To Essex County Contestants At Worcester

Ten 4-H Club boys and vocational students selected from previous contests throughout the State, recently judged at the Union Agricultural Meeting in Worcester, with the result that Forrest Haynes, Essex County 4-H member, is state champion of individual vegetable judgers.

The Essex County 4-H team, consisting of Forrest Haynes, Frank Corbin, and Frederick Usher, also placed high, and was acclaimed the state champion team. The contest was held for the purpose of choosing vocational and 4-H teams to represent Massachusetts at the National Vegetable Growers' Association Contest in Hartford, next August.

Ten dollars, to be used for an approved project, was awarded by the Massachusetts Fruit Growers' Association, to Philip Hamson of this School. He qualified for this prize by carrying a praise-worthy project last summer and by his excellent work in previous fruit contests.

Students of this School participating in fruit judging, who placed high, were Gordan Hall, second; and Philip Hamson, fourth.

At the request of Rufus W. Stimson, Agent of Vocational Education in Massachusetts, Rene Deloge exhibited at the Union Meeting a fruit display which had previously made him sweepstakes winner in a Science Day contest at the School.

Alumni Notes

Earl Turner, class of 1918, is managing his own poultry ranch and fruit orchard in Methuen. We are told that Mrs. Turner, formerly Anna Clement, and a student in the homemaking School in 1917, is a garden enthusiast and raises many varieties of flowers.

Announcement has been made of the marriage of Miss Muriel Newton of Peabody, on New Year's Eve, 1934, to Dorrall Berry, class of 1932. Mr. and Mrs. Berry are living in North Andover where they will manage a dairy farm.

Albert McCourt, '32, of Salem, a recent visitor at the School, reports that Raymond Reid, a former student, is the father of a baby boy born December 11.

Richard Heider, '32, is employed at a service station at Sutton's Corner, North Andover.

Milton Hamson, '32, is reported to be employed by the Bee Machine Company in Lynn.

George Michelson, '33, has just completed his first year at a C. C. C. camp in North Adams.

Bertram Jackson, class of 1934, is herdsman and general caretaker of the Rose farm in Marblehead.

A daughter, Sally Patricia, was born to Mr. and Mrs. Otis Curtis, class of 1931, on Christmas eve. Mrs. Curtis, formerly Bessie Manchester, graduated from the homemaking School in 1931.

Ruth Bradstreet, class of 1934, is entering the training classes at the New England Baptist Hospital, Boston, January 30.

And That Is What Statesmen Are Made Of

The Future Farmers of America, a National organization of students of agriculture, let no grass grow under their feet.

Winter months are devoted to the study of not only farm practices—as such—but to agricultural practices as a universal affair.

Studies of taxation, conservation, and new agricultural experiments are made voluntarily by individual members of the F. F. A. and in March it has become the custom of these students to enter a Public Speaking Contest.

This year the District Elimination Contest will be held on Friday, March 22. Local contests will be held at least one week previous to then.

Wide interest in the ambition of the boys participating in these contests has been shown by agricultural leaders.

It is a feather in their caps.

Massachusetts cranberry growers produce slightly more than half of the world's cranberries.

Milk Control Board Aids Mass. Farmers

The operations of the Massachusetts State Milk Control Board, begun on September 16 under Joseph C. Cort, Administrator, have profited Massachusetts farmers at a rate of one and one-half million dollars a year.

Producer prices average an increase of more than one cent per quart. This improvement alone amounts to an advance in income for the producers of the State of more than \$1,400,000 per year.

Further savings for the farmers of the Commonwealth are being secured by a new trucking schedule which means savings of from $\frac{1}{4}$ to $\frac{3}{4}$ of a cent per quart to the producers.

The bonding law, officially under the supervision of the Department of Agriculture has given the farmer added security, and the State Control Board has been able to render service by reporting to the Department such dealers who are not bonded.

Dealers too, are recognizing their improved conditions. "With every dealer paying the same price for his milk to the producers, a competitive standard is being attained which three years ago would have gone beyond the wildest dreams of the theorists", Mr. Cort declares.

These improvements have been accomplished without penalizing the consumer. It is the Board's intention to remember that the consumer deserves the protection of the Board as well as any other element figuring in the dairy industry.

Health Programs On The Air

On Tuesdays, at 4.30 P. M., through the courtesy of WBZ, the Public Education Committee of the Massachusetts Medical Society will sponsor the following programs:

January 29—Stomach and Duodenal Ulcers.

February 5—Appendicitis.

February 12—Ear, Nose, and Throat Diseases.

February 19—Bright's Disease.

February 26—Pulmonary Tuberculosis.

On Fridays, at 5 P. M. the Massachusetts Department of Public Health will broadcast over WEEI, these programs:

January 25—Breakfast and Lunch—Food for the Aged.

February 1—Pasteurization of Milk. Protection of Ice Cream.

February 8—Rheumatic Fever. Pneumonia.

February 15—Safe Water Supplies. Nuisances.

February 22—Eyes of the School Child. Bedtime for Children.

Historical trends in public health related by Eleanor J. Macdonald, A. B., will be presented over WEEI on Tuesdays at 1.30 P. M., including the following topics:

Home-made Farm Relief For Poultrymen

Is cannibalism a problem in your flock?

The Quarterly Bulletin of the Michigan Agricultural Experiment Station for November 1934 gives the results of an interesting experiment in the control of this gruesome vice.

Two lots of 140 Single Comb White Leghorn pullets were each housed in pens 20 feet square. Only 2.86 square feet were supplied each bird, less than standard minimum. Both lots were fed and managed alike, mash being continuously available in open hoppers, grain being fed in troughs once a day. Pen No. 1 was the control pen and was given a dust bath in which the birds might scratch and dust. Pen No. 2 had no bath, but each bird was fitted with a pick-out shield. These shields may be made of used rubber inner tube, and since the safety pin costs less than 1-2 cent additional, here is economical relief indeed.

In the nine months' test almost no mortality was experienced in Pen No. 2. No pain seemed to accompany the attachment of the shields, and no infection was found when they were removed.

Overcrowding is also cautioned against—not less than three and one half square feet floor space per Leghorn, or four square feet for the heavier breeds. An outside yard, moreover, will provide a chance to evade injury.

Luther Banta,
Massachusetts State College

What Must A Cow Produce

Cows vary in persistence of production and yield. R. S. Clark, in Research Bulletin 105, Missouri Experiment Station, states that a study of milk production at different ages in three breeds of cows, not on test, indicates a maximum production during the ninth year.

The average drop in milk production, month by month, is four per cent. After seven months' production there is a decided drop. The four per cent decline in milk breeds is usually a five per cent decline in butter breeds.

Maximum milk yield is generally reached the fifteenth day after calving and begins to decrease thereafter.

A fresh cow, fifteen days after calving, must produce thirteen and one half quarts daily in order to qualify, and a really profitable cow, a twenty-two quart cow, will average about 1000 pounds of milk a year.

Why not keep only 22-quart cows on your farm? F. C. Smith

January 29—Water Purification.

February 5—The Trends in Sewage Disposal.

February 12 and 19—The Trends in Sewage Disposal (Continued).

February 26—Nuisances.

Poultry Thieving

Recent bold wholesale thieving of poultry to the tune of three to five hundred birds in a single night, has caused many poultrymen to be considerably concerned. These depredations have occurred in Essex County as well as in other parts of the State and are apparently the work of an organized "gang" inasmuch as a large truck and several men would be required to handle three or four hundred birds in such a short time.

The thefts have been made on stormy or windy nights and have apparently been carefully planned and executed. Poultrymen are advised to report promptly any suspicious cars, trucks or inquiries to the state police, in order to help apprehend the thieves.

The Essex County Poultry Association members are filing cards with the state police giving their addresses, the shortest route from the barracks, and a description of their farm buildings.

A suggestion, emanating from this county, to the effect that definite tattoo marks be assigned by the State Department of Agriculture, to individual poultrymen, has been approved and accepted by the Massachusetts Federation of Poultry Associations. These marks would be registered with the state police, and would aid in identifying birds after they had been killed and dressed as well as while alive. An effort will also be made to have legislation passed that will make poultry stealing a felony instead of just a misdemeanor. Effective steps along this line can be taken only when wholehearted support is given by the poultrymen themselves, and this can best be done through the organized effort of the Northeastern Poultry Producers Council and the Massachusetts Federation of Poultry Associations, cooperating with the County Poultry Associations. This puts it squarely up to the poultryman to join his county association without delay. Act now for the good of all!

J. Stanley Bennett

MILK, FRUIT, COD LIVER OIL (Continued from page 1)

should be either green or raw, for the minerals or vitamins they contain. Cabbage, lettuce, and spinach are among the vegetables which easily might be served raw. One way which Miss Foley suggests is making thin sandwiches with dark bread, using leaves of cabbage, or some of the other vegetables, as the filling.

Fruit of most kinds is valuable, and oranges have long been recognized for the Vitamin C and minerals they contain. This is also true of Baldwin apples and tomatoes. Tomato juice, in fact, is ranked equal to orange juice for young children.

Cod liver oil, or some other good source of vitamins A and D, on which most modern babies are started, should be continued at least through the second winter.

Round About The County

The Advisory Council of the Women's Division of the Extension Department will hold a meeting at this School on Tuesday, January 29, at eleven o'clock. Luncheon will be served by the homemaking students.

February is the month chosen for the return to Essex County of Miss Grace B. Gerard, State Home Furnishing Specialist. She will instruct Newburyport groups in Home Accounts. Anyone interested in joining the classes will please notify Mrs. Mary M. McIntire, Home Demonstration Agent, Hathorne.

Classes in clothing are being conducted by Mrs. McIntire at the Middleton Sanatorium on Mondays and Thursdays.

Mrs. McIntire is also conducting a course in nutrition at the Danvers High School for mothers of Camp children. These groups were organized by Miss Rae Kauffer, Educational Secretary of the Essex County Tuberculosis Society.

Seed Catalogues

The season of seed catalogues is now with us. The gardener will begin to receive catalogues of new and interesting and wonderful creations which can be had for a mere pittance so-called. I will admit that they are always the novelties which tempt us and they are usually the novelties that disappoint us. I believe that it is desirable, however, to try out one or two of the more promising novelties in the seed catalogue each year.

It is a good idea, for example, to grow a different vegetable, one that you have never tried before, each year. In this way you will not only improve your knowledge of the subject but you will discover many new and interesting vegetables which you can add to your vegetable diet. Chinese cabbage is worth considering if you have not already done so.

There is a wealth of practical information in seed catalogues. They should be carefully looked over, studied and if you wish to be sure of getting the seeds that you want for your garden, I think that it will pay you to order your seeds early.

Arnold M. Davis

Flowers—Indoors

You can now begin to cut the sprays of forsythia, the flowering quince, pussy willows, and other spring flowering shrubs and bring them indoors and force them into bloom. In each case they will require from ten to twenty days to come into bloom if the buds have not been killed by severe weather and I believe that at the time of writing this we have had no weather severe enough to seriously injure our buds.

Arnold M. Davis

Recent Developments For Gardens

According to the 'Back Yard Gardener,' whom we suspect keeps up with fads and foibles, in spite of his 'down East' drawl, there have been some rather recent developments along the line of gardening gadgets.

One is a rake with rubber teeth which are stiff enough to pick up debris without tearing up the grass.

And there is a new kind of pruning shears with a hook near the blade where it won't catch as the old hooks near the handle have a habit of doing.

New kinds of labels are out too, and trowels, and spades, and hoes: all improved models.

Patch-Up Season

For the next month the gardener will have the best opportunity that the year presents, to go over his equipment and make necessary repairs.

Starting with that ever useful and perhaps least appreciated piece of gardening equipment, the lawn mower, this season gives us the best opportunity that we have to take the lawn mower to pieces, thoroughly clean it, tighten it up, be sure that the cutting surfaces are correctly aligned and perhaps by reversing the gears and putting a little valve paste, such as is used in grinding the valves in an automobile, on the cutting surfaces and spinning the wheels backward by hand, regrind the blades sufficiently to insure smooth easy cutting next spring. I would pay particular attention to the oil holes, see that they are all clean and free, and in good working conditions and then when assembling the machine give it a thorough oiling in the locations where it is needed.

After the lawn mower has been trued up, pay attention to the garden spray pump. The sprayer should be taken to pieces, thoroughly cleaned out, and the moving parts checked to see that they are behaving properly. Be sure that the packing in your plunger is working as it should be. New packing will occasionally give you a sprayer which works like new. It may be desirable to repaint the tank if it is of steel or galvanized iron, and has started to rust in one or two spots.

After the sprayer has been straightened up ready for spring activities, the pruning shears, saws, if you use them, spades, rakes, hoes, and so forth will all benefit by being sharpened and cleaned.

I might also point out the value of sandpapering the handles of rakes, hoes and spades with a No. 1 sandpaper and then taking a cloth with some linseed oil and rubbing the oil into the freshly sanded handles. Letting this set you can build up a very smooth type of handle to work with which will be free from splinters.

Plans might also be made now for

"For We Shall Have Music"

Compositions for the 1935 4-H Music Contest have been selected from the world's best-known operas, and are herein listed:

"Evening Star" from Tannhauser" by Richard Wagner; "Then You'll Remember Me" from "The Bohemian Girl" by Michael William Balfe; "Overture" from "Mignon" by Ambroise Thomas; "Overture" from "Martha" by Frederick Von Flotow; "For He's Going to Marry Yum-Yum" from "The Mikado" by Gilbert and Sullivan; "Barcarolle" from "The Tales of Hoffman" by Jacques Offenbach; "Prelude" and "The Bridal Chorus" from Wagner's "Lohengrin"; "The Prize Song" from Wagner's "Die Meistersinger"; and "Intermezzo Sinfonico" from Pietro Mascagni's "Cavalleria Rusticana."

The object of the contest, now an annual 4-H event, is to stimulate interest in music in the home, club, and community.

Prizes are awarded for individual and group honors.

Delphiniums

Delphiniums, of course, are one of the choicest flowers which we have. I believe it is the ambition of practically every gardener to have Delphiniums in blossom through as much of the summer season as possible. Your established clumps of perennials will come along and give you bloom in July and June, and if they are cut down at that season of the year you can probably depend on the second crop later in the fall. During the latter part of July and August it is somewhat impossible to get blooms unless you start the seeds early indoors.

If you will take a seed flat or shallow box, fill it with soil and put it in a warm and sunny location and plant Delphinium seeds which you may get from a seedsman or have saved from your own garden, you will be sure of a fairly good rate of germination. After the little seedlings are starting to show their first leaves, they should be transplanted, preferably into individual pots or into flats an inch and one-half apart. They should be allowed to grow there unchanged for some length of time or until they become crowded, at which time they should be again transplanted. If they are handled in pots or small tin cans you will find that you can carry them along until time of planting out of doors. These same plants then planted outdoors will bloom during the latter part of July and August.

Arnold M. Davis

putting aside a special place such as one wall of the garage or a wall in the barn where all of these tools can be kept. Hooks or nails should be provided to hang the tools on.

Arnold M. Davis

ESSEX FARMER AND HOME MAKER

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VOL. 16

HATHORNE, MASS., FEBRUARY, 1935

NO. 2

Baldwin On Decline In Massachusetts

The severe cold of last winter gave an old favorite, the Baldwin, a push on the downward path, from which it probably will never regain its former position of popularity. This is the opinion of W. H. Thies, extension pomologist of the Massachusetts State College. The Baldwin will continue to occupy a place in the apple production of Massachusetts, because there is no other late variety to replace it, admits the State College man. However, the fact that most of the Baldwin trees are mature, and other varieties have predominated in plantings of recent years, lends assurance to the prediction that future crops of Baldwin apples will be smaller than they have been in the past, when the Baldwin has had the largest production of any single variety in the state.

This does not mean that the production of Baldwins will come to an abrupt end. On the contrary, with a heyday that has lasted since Revolutionary times, it may be a favorite apple in the Northeast for at least another generation. The lack of a satisfactory variety to take its place will be a deciding factor in determining the future of this old favorite apple.

Professor Thies believes there are some lessons for the fruit grower in last winter's experience. The trees which suffered most injury were those in exposed locations, or those lacking in vigor, either from the production of large crops of fruit or from lack of fertilization.

Bearing the various factors in mind, the State College man suggests taking good care of surviving Baldwin trees, but giving considerable thought and study to the selection of soil and site before making any further plantings of the variety.

Unit Course In Floriculture Offered By This School

The two unit classes in home grounds improvement have completed a year's work. Lessons will continue through the spring with seed sowing, transplanting, and a study of garden insects, diseases, and color in the garden. Members may bring their own

(Continued on col. 3)

Twenty-first Farmers' and Homemakers' Day

March 20, 1935

The School is pleased to announce its twenty-first annual Farmers' and Homemakers' Day. For a score of years, friends of the School have come



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with increasing interest to hear the forecasts of agriculture and home economics.

With new problems constantly arising, new opportunities to seek advancement are offered. It is the desire of this School to assist farmers to solve their problems and hence allow agriculture to take its proper stand in Essex County.

The morning program this year will open with the introducing of the new Commissioner of Agriculture, Edgar L. Gillett, to those who have not yet had the pleasure of meeting him.

We are extremely proud to have for our main speaker, at eleven o'clock, Mr. Bradford Williams of the Trustees in charge of Public Reservations, who will give an illustrated lecture on

(Continued on page 2, col. 3)

What Do You Think?

Agriculture and Industry are arrayed at the opposite poles of the economic structure. With the close of the World war both these groups lost the larger portion of the export trade.

For years Industry has benefited by a protective tariff. Due to the large number of farmers it was next to impossible to reduce production (supply) and therefore maintain the price on products of the farm.

Agriculture: From 1929 to 1932, agriculture showed a drop in prices of 55% or from 100 down to 45. Production dropped only 3%.

Industry: Because fewer persons directed positions of leadership, industry shut down production from 100 to 40 but maintained prices with a drop of only 22%.

Farmers through their leaders have developed an internal tariff called processing taxes whereby those who cooperate get the benefits of payments from these taxes in agreeing to limit production to domestic demand.

Some city people argue that farmers are all wrong in adopting processing taxes on his products. But how about the high prices maintained on industrial products since 1929? Does the city man complain about those?

What are the facts? In a National vote of hog raisers, 70% voted to continue the A. A. A. corn-hog project. Cotton farmers voted ten to one in favor of continuing the cotton control act.

What are the results to the farmer? Since February 1933 to October 1934 farm prices increased as follows: Cotton from 5.5 to 12.5 cents per pound; butter from 18.4 to 24.6 cents; hogs at Chicago from \$2.94 to \$5.20 per hundred pounds; wheat from 19.4 to 76.7 cents per bushel; and tobacco from 12.1 to 32.4 cents per pound. This means increased buying power for forty million people.

F. C. Smith,

seed and enjoy the privilege of sowing it and having the seedlings, and later the transplants, taken care of at the School.

March sees the beginning of a new season of unit class work when an opportunity is offered all residents of Essex County to form a new county class. Particulars may be obtained by writing Director Fred A. Smith, Hathorne.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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Calendar

March 8—Public Speaking Elimination Contest at Bristol County Agricultural School.

March 9—4-H Poultry Rally at this School.

March 20—Farmers' and Homemakers' Day.

Honor Roll

At the end of the second term in the agricultural department, the following boys were on the honor roll:

Huntington Howard, Ernest Thayer, Henry Cooper, Philip Hamson, Edward Bessom, Vincent O'Donnell, Merle Graffam, Elmore Smith, Walter Alley, all of Lynn; Ruth Fairweather of Andover, Rene Deloge, John Wilcox, of North Andover; Vincent Nelson, Warren Kneeland, Rosairo Richards, of Salem; Forrest Haynes, Gilbert Wallace, Charles Pettengill, of Haverhill; Lawrence McDermott, Eileen Stewart, John Marshall, Danvers; Victor Pohju, John Fullington, Sheldon Robinson, Peabody; Nicholas Fiore, Richard Estes, Swamps o't; J. Harvey Underwood, Essex; Andrew Bye, Gilbert Freeman, Beverly; Norman Wood, Amesbury; Lewis Norwood, Rockport; Francis Gillen, Norman Henry, Lawrence; Joseph Blunda, Norman Chambers, Ipswich; Myron Eastwood, Methuen; James Weber, Middleton; and Fred Scribener of Topsfield.

Public Speaking Under Way

The first of a series of elimination contests in public speaking was held at this School on February 20, under the sponsorship of the Future Farmers of America.

Subjects ranging from taxation, proven sires for the dairy herd, man's relation to animals, and the agriculture of early days, were very efficiently discussed. The judges, Mr. Frederick H. Pierce, principal of the Beverly High School; Mr. Richard Lee, of the Danvers Savings Bank; and Reverend Mr. Sheldon of Topsfield, found it difficult to place the contestants, each of whom merited congratulations for his preparation and delivery.

Of the eight students who spoke, the following five were chosen to represent this School at a district elimination contest to be held on March 22 at the Bristol County Agricultural School, in Segreganset:

- (1) Ernest Thayer, Lynn
- (2) Richard Gilman, Rowley
- (3) Francis Gillen, Lawrence
- (4) Clarence Patterson, Peabody (alternate)
- (5) John Marshall, Danvers (alternate)

Beacon Hill Notes

Edgar L. Gillett, the new commissioner of agriculture, was elected chairman of the executive committee of the Union Agricultural Meeting at a meeting on February 13 of the heads of the thirty-seven agricultural organizations which hold their sessions in Worcester in January of each year. He takes the place of the former commissioner of agriculture, Dr. Arthur W. Gilbert, who was given a vote of appreciation for his services in building up the Union Meetings to their present size and importance.

The State Department of Agriculture has recently announced the appointment of Furmer H. Greeley of Salisbury as director of the Division of Markets to succeed Lawrence A. Bevan, who resigned recently to take a position as Extension Economist for the New Jersey State College of Agriculture.

High Yield of Potatoes and Onions

The production of potatoes and onions in Massachusetts during 1934 yielded the growers three million dollars.

Three thousand acres planted to onions throughout the state yielded one and one-half million fifty-pound sacks.

2,560,000 bushels of potatoes were harvested from the 16,000 acres planted.

FARMERS' AND HOMEMAKERS' DAY

(Continued from page 1)

the subject which is becoming more and more important to those interested in preserving the natural beauties of Massachusetts: public reservations.

At 1.30, in the main hall of the agricultural building, the women's section will entertain its guests with a meat cutting demonstration under the direction of George L. Moore and Mrs. Imogene B. Walcott of the First National Stores.

Sectional meetings will all start at 1.30, as in previous years. Their meeting places will be designated on programs which will be distributed among the guests.

Poultrymen will hear G. T. Klein, Extension Poultry Husbandman of Massachusetts State College, and the Essex County Poultrymen's Association will sponsor a baby chick show and auction.

Professor R. W. Donaldson, of Massachusetts State College, will talk to the dairymen on "Forage Crops". Mr. William Lynn, manager of the Ackerhurst farm, North Andover, is also on the dairy program, and Frank E. Mott, Milk Inspector and Chemist of the Boston Health Department will speak on the subject, "Vitamin 'D' Milk and the Dairymen".

Fruit growers will learn the spray schedules for 1935 through Professor W. H. Thies of the Massachusetts State College. W. E. Piper of the Division of Markets, State Department of Agriculture, will talk on The Marketing of Apples, and E. F. Guba of the Waltham Field Station is to give some pertinent facts on the control of fruit diseases.

Market gardeners will hear F. K. Crandall, assistant agronomist of the Rhode Island State College, discuss the subject "Improving Soils for Market Gardening Purposes". O. C. Boyd, extension plant pathologist of Massachusetts State College, will list some results of seed treatment demonstrations. W. D. Whitcomb of the Waltham Field Station will talk on "Spraying and Dusting Vegetables with Derris and Pyrethrum".

Floriculture meetings will be announced through the newspapers at a later date.

A display of old agricultural tools and implements and household conveniences will be on display in the basement of the farm mechanics building. This collection of antiques has been made through the efforts of Instructor H. P. Thurlow.

It is expected that the Essex County Rabbit Breeders' Association will hold an exhibit this year in room 25, with Daniel R. Pinkham, president of the association, in charge.

The usual educational and trade exhibits will be modern in spirit.

21ST ANNUAL
FARMERS' AND
HOMEMAKERS' DAY
WEDNESDAY, MARCH 20, 1935

ERA Gardens

Community gardens and canning kitchens, which returned at least three dollars for every one spent, by more than 20 cities and towns in 1934, will be aided by ERA funds in 1935, according to word received by Professor W. R. Cole of the Massachusetts State College. Professor Cole, garden and canning specialist of the State College staff, has assisted dozens of cities and towns in organizing and planning gardens to produce food for welfare purposes and is establishing canning kitchens for preserving the vegetables for use during the winter months.

Several options are offered by ERA officials in the matter of canning-kitchens. Under one plan, the ERA pays for labor only, with the municipality paying all other expenses and getting all the canned produce. Under a second plan, the ERA pays for cans and raw vegetables or fruit, in addition to labor, while the city or town provides a building, equipment and power; the canned produce in this case goes to the ERA commissary. A compromise between these two plans also is offered, with the ERA paying for cans and labor and the municipality meeting other expenses; under this plan the canned goods would be divided between the local welfare board and the ERA commissary.

"With ERA funds available to pay for labor charges," says Professor Cole, "Massachusetts cities and towns have an excellent opportunity to reduce their welfare food bill for next year by growing and preserving vegetables." The assistance of the State College in planning the garden and canning kitchen will be given to all municipalities considering such projects.

Co-operation

Chairman James O'Brien of the Massachusetts Milk Control Board has recently stated that it is the hope of the Board that Massachusetts dairymen supplying milk to Boston dealers handling Massachusetts milk only will soon come under the jurisdiction of the State Board.

A series of informal conferences between the administration of the State Board and officials of the Agricultural Adjustment Administration, under whose license the Boston Milk Market now operates, has developed the feeling that the complete stabilization of the Boston market can be obtained only through cooperative effort by both agencies.

So far as the consumer is concerned, it is hoped that the price of milk in the Boston market may be maintained at a reasonably low level consistent with the policy of the State Board to insure a good quality milk for Massachusetts users.

Practice Economy In Feeding Dairy Cows

In view of the fact that the unprecedented drought during the summer months last year has caused serious feed shortages and a subsequent rise in prices, it is imperative that the farmers of Essex County reduce to a minimum their expenditures for feed. Professor Branch, Extension Farm Management Specialist of the Massachusetts State College, stated recently in a lecture here in this county, that feed costs amount to sixty per cent of the cost of producing milk so that it is quite obvious that economical feeding methods must be employed.

To get optimum results, a certain amount of protein and total digestible nutrients must be fed anyway, so that the problem is really one of learning to use economical methods in the choice of feeds. Roughage, both in the form of hay and silage is especially high in price this year. Because of the foregoing fact and the fact that much of the land in Essex County can be used for more profitable crops than forage crops, it is necessary to feed more grain than in other parts of the state. The Essex County farmer then, must know how to compare concentrates, if he is to select his feeds economically. A comparison may best be made on the cost per ton of digestible protein and total digestible nutrients. A comparison on the basis of the actual feed prices is often misleading because some feeds are more digestible than others. For example, a ton of wheat middlings when selling at \$40 per ton costs approximately \$4.50 more per ton of total digestible nutrients than a ton of hominy selling at \$45 per ton. Feeds may be compared by dividing the selling price per ton by the per cent digestibility of protein and total nutrients.

For example:

Cottonseed Meal	
\$53 price per ton	
37.4 percent protein	
\$158.38 per ton of digestible protein	
\$53 price per ton	
78.2 percent of T. D. N.	
\$68.93 per ton of total digestible nutrients	
Corn Meal	
\$45 price per ton	
7.1 percent protein	
\$633.80 per ton of digestible protein	
\$15 price per ton	
81.7 percent T. D. N.	
\$55 per ton total digestible nutrients	
Corn Gluten Feed	
\$44 price per ton	
21.6 per cent protein	
\$203.70 per ton of digestible protein	
\$44 price per ton	
80.7 percent T. D. N.	
\$54.40 per ton digestible nutrients	

The above examples show that when nitrogenous concentrates, such as linseed meal, gluten feed, cottonseed meal, etc., are being compared,

(Continued on page 4, col. 3)

Pullorum Tests Show Gain In Fight Against Poultry Disease

The story of a winning fight against pullorum disease, one of the most serious poultry diseases, is told in a preliminary report of the pullorum testing service conducted by the department of veterinary science of the Massachusetts State College. The report was issued recently by Dr. Henry Van Rookel, in charge of the pullorum testing laboratory.

Up to January of this year, a total of 242,655 tests of individual birds for pullorum disease had been made at the laboratory and only 0.28 per cent of the tests were positive, indicating that the birds were infected with the disease. If this percentage should be maintained to the end of the testing season in April, it will establish a new low record for positive tests, or a new high mark for freedom from pullorum disease in tested flocks.

Significance is attached to the fact that in flocks which were tested for the first time 2.45 per cent of the birds were found to be infected with pullorum disease. On the other hands, in flocks which had been tested for three or more years, with diseased birds eliminated as they were shown up by the test, pullorum disease has been reduced until all but 0.12 per cent of the birds are free from the disease.

The poultryman interested in buying chicks should protect himself against heavy losses from pullorum disease by buying baby chicks only from poultrymen whose flocks have been tested and are recognized as officially "pullorum clean." County agricultural Agent F. C. Smith can provide lists of poultrymen and hatchery men whose flocks are free from pullorum disease.

Capping The Milk Problems

Milk bottle caps will soon show accurately the condition of the milk within them, according to an announcement of Commissioner of Agriculture, Edgar L. Gillett, chairman of the State Milk Regulation Board. Acting in accordance with the milk grading law passed two years ago, the Board has established standards for milk and will require that all milk sold in the State shall be labelled in accordance with these standards. The regulations will be put into effect within the next two weeks but the complete labelling of the milk will take somewhat longer as milk dealers will be given a reasonable time in which to use up supplies of bottle caps already on hand.

Plaid In Vogue For 1935 Reports M. S. C. Specialist

We're all turning Scotch this year, at least to the extent of wearing plaids, says Mrs. Esther C. Page, clothing specialist of the Massachusetts State College. In commenting on fashion trends of 1935, Mrs. Page says that probably the outstanding feature is the predominance of plaids in fabrics of all kinds. "No longer can it be said," insists Mrs. Page, "that plaids do not become a particular individual, because plaids are offered in such a wide range of patterns and colors that any woman can find a plaid of some kind to suit her type."

Cotton materials continue to grow in popularity among the fabrics, and will be found attending the most formal of afternoon teas and evening parties, taking the place of silk for many purposes in the season's styles. Cotton also holds its place for sports and every day wear.

Accompanying the popularity of cotton, Mrs. Page reports a continued increase in the making of dresses at home. Merchants have been stimulating the sale of yard goods, and in 1935, it's not only thrifty but smart to be attired in a homemade dress. The popularity of making dresses at home is attested by more than 100 groups of women over Massachusetts, studying problems in sewing on cotton under the direction of Mrs. Page and leaders trained by her through extension service classes.

Commenting further on 1935 styles, Mrs. Page states that queer colors and shirtwaist dresses are very much "in" this year. Every dress has its jacket or cape. She suggests that this gives the homemaker an opportunity to make a new jacket for an old dress and have what appears to be a new outfit. Jackets will be equally appropriate for sports, every day, and formal wear.

Unnecessary Return of Merchandise

The Boston Business Bureau and the Retail Trade Board of the Boston Chamber of Commerce are co-operating with the Consumers' Councils of Massachusetts, a division of the National Emergency Council and Agricultural Adjustment Administration, to secure the co-operation of the public in reducing the amount of unnecessary return of merchandise, which now results in an estimated loss to consumers of Massachusetts of over \$12,000,000 a year.

The unnecessary return of merchandise has always been an obstacle in the path of reducing the cost of distribution and, because of increasing returns, the retailers have had to add an increasing amount to their markup to take care of this increas-

Planning For Garden Activities

To the gardener, this is the season of the year when you wonder how long it will be before you can actually start to work. The most logical way of going at the problem in planning what you are going to do is to find out what you need to do, ask yourself the following questions:

Do I have a satisfactory lawn? Is the foundation planting sufficiently satisfactory? Are my drives conveniently located? Should I have more trees around the house? Do I need to have a flower garden? If so, where? In other words work out a chart which will give you the type of home you have visualized. I believe that more work can be accomplished by first of all planning exactly what you are going to do and then working out and completing your plan, than can ever be accomplished by starting in on more or less of a puzzle. After you have definitely planned the type of home grounds you would like, figure out the various steps of operation to completely carry out your plan.

You will find that if you do this, in most cases, you will only need to revise certain details which for one reason or another have proved unsatisfactory. Your trees may need to be pruned. This is particularly true if you have nice old elm trees and are anxious to save them. Your hedges may need rejuvenation. That is to say, cut them back severely at almost any time from now on. Plants which have been suffering from winter injury should be pruned up and made as presentable as possible. Let me caution you again about pruning spring flowering shrubs too early. Spring flowering shrubs if pruned now are only being robbed of their flowering effect next season. For that reason I would suggest that the spring flowering shrubs receive no pruning until after they are through blooming at which time they can be cut back very severely and will benefit by that cutting. It would also be advisable if one is working out garden activities to look through seed catalogs and select equipment and fertilizer which you think you will need, tools, and perhaps books may be of value.

Write to the State College and find out what materials they have available. Other organizations who are doing research work along the lines of ornamental horticulture who publish occasional timely leaflets on their research should be looked into.

A. M. Davis

ing amount to their expense. This expense has become a substantial proportion of the amount the consumer must pay for merchandise. Any reduction in this expense will, because of competition, be reflected in a reduction in the cost of merchandise.

Round About The County

Laying the foundation for successful living is the general topic of a series of meetings to be conducted in Lynnfield by Mrs. Ruth D. Morley, Child Care Specialist, of the Massachusetts State College. These meetings will be held at 2 P. M. on Wednesday, March 13; Wednesday, April 3; Thursday, May 9; and Wednesday, May 29.

Miss Grace B. Gerard, Home Accounts Specialist, of the State College, will conduct three meetings at the Y. W. C. A. in Newburyport on February 28, March 29 and May 10. These will be all day meetings, starting at 10.30 A. M.

Mrs. Mary M. McIntire, Home Demonstration Agent, is conducting four classes in dress-making at the Essex County Sanatorium. Approximately forty young women are learning the art of garment finishes and cotton dress-making.

On March 13, Mr. A. M. Davis, State Horticultural Specialist, will return to Essex County for an evening meeting at the Gloucester Community House on Angle Street. Mrs. Lincoln S. Symonds will have charge of the meeting.

Many Peaches Killed

For the second successive year, the peach crop in many parts of Massachusetts appears to have been almost completely destroyed by cold weather, according to observation of the Massachusetts State College fruit men. Professor J. S. Bailey of the pomology department reports finding only three live buds out of two thousand which he examined a short time ago. Similar percentages of dead buds have been reported by orchardists in other parts of the Connecticut valley. In some orchards in eastern Massachusetts there seems to be a possibility of a small crop on some of the more hardy varieties.

Professor Bailey and his associates are recommending moderate fertilization and cultivation, to enable the trees to recover next summer. But they warn that too much stimulation of growth by heavy fertilization may do more harm than good, by promoting an excessive crop of leaves which the tree cannot support during dry weather.

PRACTICE ECONOMY

(Continued from page 3)
the cost per ton of digestible protein should be used as the basis of comparison and when carbonaceous concentrates such as corn meal, barley, oats, and hominy are being compared, the cost per ton of total digestible nutrients should be used.

Figures on the percent digestibility of the various feeds may be obtained from several sources such as Henry and Morrison's, "Feeds and Feeding", various feed manuals, etc.

R. E. MacCleery

ESSEX FARMER AND HOME MAKER

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NO. 3

Herb Conscious

A. G. Perkins

Every small gardener could well afford to raise herbs both for fragrance and culinary purposes. There are many herbs suitable for small gardens that can be easily grown and will bring much pleasure to those who love plants.

The mint family

offers two popular members that will flourish in the garden. Both spearmint and peppermint are useful plants. They are perennials and if properly cared for will thrive year after year. The plants spread by stolons and send out large areas of leaves. The stems are square. The flowers come in late July and August and are arranged in spikes or whorls. The mints like a damp soil to dwell in but will grow in higher locations. These plants are easily propagated from runners slipped from parent plants. There are many uses for the mints including flavorings from the oil in the leaves, mint sauces, jellies. They are often used for drinks in the summer.

Sweet Marjoram

is one of the most pleasantly scented herbs in the garden. It is an annual in the North and for this reason it is well to start the seeds indoors and transplant them to the garden after danger of frost is over. The main stem of the plant is square, sending out side branches, round and wiry, with a reddish tint. The leaves are of a soft gray-green color. The flowers come at the end of July and have a peculiar inflorescence consisting of tiny "knots", about one-eighth inch long. These plants prefer a sunny, dry, well-drained exposure. Sweet marjoram may be used for flavoring but it is better known for its fragrant qualities.

Southernwood

is a delightful friend to have in the garden. Its leaves give forth a strong aromatic odor. It is a perennial and propagates by root division. Southernwood is a feathery gray-green plant with yellowish-white flowers which hang in a loose panicle. They attain a height of two feet or more. The plant seems to prefer a clay soil in a sunny situation. Aside from its fragrant qualities it has value as a tonic.

Bush basil

is another charming little plant fragrant of lemon and spice. It is an annual and can be raised easily from seed sown out-of-doors when danger of frost is over. This herb grows to a height of from eighteen inches to

(Continued on page 4, col. 1)

Farmers' and Homemakers' Day

Clement weather brought fifteen hundred friends to the School on Farmers' and Homemakers' Day to hear a program which had been carefully arranged by members of a committee who have the interest of agriculturists at heart.



EDGAR L. GILLETT

Commissioner of Agriculture
in Massachusetts

The pictures shown by Bradford Williams, Field Secretary of the Trustees in charge of Public Reservations in Massachusetts, created a common desire that the work of this organization might go on.

The meat-cutting demonstration with its accompanying talk on cooking meats, presented for homemakers by the First National Stores, Inc., must have converted many old-fashioned house-wives, so sane did the new cooking methods seem.

A baby chick show, and auction were introduced this year by the poultry division. George Purkis of Topsfield was sweepstake winner.

W. E. Piper of the Division of Markets, State Department of Agriculture, in discussing the grading law, stated that certificates will be granted on request to those whose grading has been inspected and approved. (There is an inspection fee.)

W. H. Thies of the Massachusetts State College, speaking for the fruit men, urged that orchardists maintain a unit large enough to justify good equipment, suggesting that a five

Public Enemy No. 1

The Dutch Elm disease which has already spread throughout New York, New Jersey, and Connecticut, must be eliminated if the American elm tree is to be saved.

Individuals must decide whether the elm is a priceless possession. Our citizens must not only realize the need of attacking the disease. They must act.

The disease is detected by wilted leaves, and a discoloration in the sapwood of the tree's branches.

The Massachusetts State College and the State Forest and Park Association, Boston, will analyze specimens which are thought to be diseased.

Dr. J. H. Faull, Pathologist, of the Arnold Arboretum, states:

"In my judgment there is no alternative to eradication if our elms are to be saved. The time for action is when the first wilting occurs. Such trees should be immediately removed and burned."

Prepare now to look for wilted and dying leaves between July 1 and September 15. As a precaution, tree sanitation should be practiced. Carriers of the disease, which is in the form of a fungus, should be controlled. Most borers prefer to operate in weak and dying trees. By eliminating dead areas in the bark and branches of trees the multiplication and spread of borers will be reduced.

To fancy New England without an elm, would make one's blood run cold!

State Contest Won By Essex Student

It is not without pride that Essex receives the honor of placing first in the State Public Speaking Contest held under the auspices of the Future Farmers of America on March 22 at Amherst.

Student Ernest Thayer of Lynn has consistently won first place in each of the elimination contests: the first, a school contest, the second, a district contest, and finally, the third, a State contest.

Thayer's speech, on the subject of "the proven sire for the dairy herd," was conclusively written, and ably delivered.

ATHLETIC BANQUET

APRIL 3

(Continued on page 3, col 2)

Essex Farmer and Homemaker

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Secretary, R. H. Campbell Topsfield
Treasurer, Mrs. Charles Thomas Essex

Calendar

April 3—Athletic Banquet and Dance at this School.

April 4—Joint Assembly in Agricultural Hall.

April 26—Agricultural Department Closes. Students go on project.

Two Bulletins

The Massachusetts State College has a bulletin on hedges which contains very constructive information for the person who is starting a new hedge or for the one who has an old hedge and wishes to maintain it and take care of it so that he can get the most from it. A letter or card addressed to the State College requesting the bulletin on hedges will bring it to anyone desiring it.

Another State College bulletin which is recommended is one entitled "Facts of Lawn Management" written by Professor Dickinson. A copy of this bulletin should give anyone, regardless of the type of lawn he has, excellent information on a well-balanced feeding program for his lawn.

Fertilize Injured Trees Moderately

Winter-injured fruit trees need to be given every possible care in order to promote recovery, according to W. H. Thies of the Massachusetts State College. Unusually large applications of fertilizer probably will not be advisable. The injury has been to the tops of the trees. The root systems are still intact and capable of absorbing large quantities of water and plant food; the tops, in their injured condition, require less water and plant food than formerly. Hence, extra applications of fertilizer might be wasted on trees whose tops have been injured.

Professor Thies recommends that fruit growers include moderate applications of fertilizer, cultivation of sod orchards with a disc harrow, and use of a mulch around the trees to conserve moisture. These practices should do much to encourage the recovery of winter injured trees.

Home Gardeners' Meetings At Waltham

April 9 and 10 are the dates on which home gardeners will go to the Waltham Field Station, 240 Beaver St., Waltham, for the Fifth Annual two-day short course which has been planned to help those who from preference or necessity plant and care for their own grounds.

A very slight registration fee will be charged to cover expenses.

Meetings will open at 9:30 A. M.

Short Course In Vegetable Growing At Amherst

A short course in the production of vegetables designed to present the more important fundamentals in the culture of common vegetable plants is being offered by the Massachusetts State College from Monday, April 8 through Saturday, April 13, at Amherst.

The course will cover practical discussions in the form of lecture and laboratory periods of such problems as soil, management, manures and fertilizers, varieties and seed sources, seedage, plant growing, cultivation and the control of insects and diseases.

Students registering in the course must be at least 18 years of age. Applications should be sent to Roland H. Verbeck, Director of Short Courses, Massachusetts State College, Amherst, not later than Thursday, April 4.

A nominal tuition fee will be charged to cover expenses.

Athletic Banquet and Dance Wednesday, April 3

Reservations for the Athletic Banquet and Dance must be in the hands of Horace J. Shute not later than Saturday, March 30.

As in the past, the banquet will be held in the Homemaker Building at 6 P. M. and the dance in Agricultural Hall at 8 P. M.

Back To The Land

A garden plan for every family's size and taste is offered by the extension service of the Massachusetts State College. With the aid of nutritionists, Professor W. R. Cole, of the State College staff, has worked out the amount of vegetables which an average person should eat in the course of a year, and has planned several gardens to provide those needs or part of them.

In order to meet the needs of different families, Professor Cole has prepared plans for gardens which will provide fresh vegetables and some for canning, also one which is intended to provide only enough for consumption as fresh vegetables. These are available on the basis of one person, three, and five persons. Each plan gives the amount of space required, the amount of seed for each kind of vegetable and the number of feet of row, recommended varieties and planting dates.

The garden plans are available free of charge at the Extension Service, Massachusetts State College, Amherst.

Goat Breeders Organized In Essex County

On March 13, as a result of increasing interest shown in milk goats and goat's milk, an organization of goat breeders in Essex County was formed and will be called The Essex County Milk Goat Breeders Association.

The organization was formed primarily to promulgate the cause of the milk goat. Membership is open to anyone interested in goats but will be confined to Essex County and adjacent towns.

The officers elected were:

President—Ralph W. Burnham, Ipswich.

Vice-President—E. W. Edmunds, Jr., Wakefield.

Secretary—R. H. Campbell, Topsfield.

Treasurer—Mrs. Charles Thomas, Essex.

Executive Committee—V. R. Bennett, Ipswich. E. R. Dykens, Reading, F. C. Fears, Rockport.

Advertising—C. S. Thomas, Essex.

Control of Chronic Mastitis

It has often been remarked of late that mastitis or garget is a disease which is not important enough except in acute stages to receive the attention of the average dairyman. The latter will agree that his time and money may be profitably spent in eradicating tuberculosis and contagious abortion but it is difficult for him to conceive of reasons for taking the trouble to eradicate mastitis. It is only natural that this disease is considered of little importance by the average herd owner because of the chronic and obscure nature of the disease. However, the economic loss caused by this disease probably exceeds either that of tuberculosis or abortion. The foregoing fact is not surprising when we realize that the disease results in the formation of a scar tissue to replace the glandular, secretive, and milk-making tissue. When a whole quarter has had its secretive tissue transformed into scar tissue, it means it is no longer secreting milk and the cow is giving only three fourths the milk she could had she not been previously infected.

At the present time the Agricultural Adjustment Act is providing an indemnity of twenty dollars for grades and fifty dollars for pure-breds badly infected with mastitis and coming from herds free from tuberculosis and contagious abortion. Therefore the present is an opportune time to start a mastitis cleanup campaign.

There are many methods used for detecting the disease but any one method used alone is not as reliable or worth as much as when it is used with others. A combination of the following three methods gives a practical means of diagnosis:—

1. Physical examination of the milk.

This test comprises the use of the strip cup before milking to determine the presence of flakes in the milk. The presence of flakes is often found in cows infected with a form of mastitis so milk that changes in the udder are not recognized by a physical examination.

2. Chemical examination of the milk.

This test is made by use of the bromthymol blue indicator to determine the presence of an alkaline milk which indicates an infection with mastitis. The test is not reliable during all stages of lactation as for example during the six to nine days after calving when the milk is more acid than normal.

3. Physical examination of the udder.

The value of this examination far surpasses that of any other since it reveals any changes in the udder caused by this disease some time in the past. This test is best made directly after milking by a competent veterinarian. After this first examination, the herdsman may make it

(Continued page 4, col. 2)

Eliminate Strawberry Mite This Way

Horticulturists in Essex County who propagate strawberries for sale or for home use are being troubled by the activities of the cyclamen mite, a pest which has given florists considerable concern for many years.

These mites, rarely seen by the naked eye, probe the tissues with their sharp beaks, and in sucking up the fluid in the cells leave the injured parts shriveled. Continued growth of surrounding tissue leads to severe distortion and dwarfing of the leaves; also causes a discolored appearance. Shortening of petioles, underrolling of the leaf margins at base and general stunting of the plant are the main characteristics of severe attack. Badly infested plants naturally do not put out strong runners.

Damage the first year may be "spotty" in the field and not serious. Usually by the second year, if the mite is well established, serious damage may be very general.

The mites overwinter in the field on the plants. Most of them hibernate in the crowns where the long hairs beneath the leaf sheaths give ample protection. So far as is known only adult females winter over.

Distribution is chiefly by infested plants. It is definitely proved the mites are wind borne. Experimental efforts to spread infestation on tools or clothing have so far given negative results.

The approved treatment of strawberry runners and plants to control the mite is immersion in water at 110°F. for twenty minutes. Runners should be placed in the water loosely to allow heat to penetrate. The runners should be set out as soon as possible after dipping.

This method should insure mite-free plants.

J. F. Gallant

FARMERS' DAY

(Continued from page 1)

hundred bushel crop is the smallest that can be profitably grown.

Ways of cutting roughage feed costs were explained to dairymen by Professor Ralph W. Donaldson of the State College. Mr. Frank E. Mott, Milk Inspector and Chemist of the Boston Health Department, discussed the importance of Vitamin D. milk.

Irrigation problems were unravelled by Paul Dempsey of the Waltham Field Station. Soil improvement was stressed as an important stride in market garden purposes by F. K. Crandall, Assistant Agronomist of the Rhode Island State College.

Floriculture enthusiasts were delighted with Mr. Heinrich Rohrbach's learned discussion of planning, planting and caring for the home grounds.

The usual exhibits, educational and trade, were interesting, up to date, and instructive.

Electric Light Traps Fight Fruit Pests

Electric light traps in an apple orchard have a definite value for checking on the relative numbers of apple pests in the orchard, states Professor A. I. Bourne of the entomology department of the Massachusetts State College. Last summer, Professor Bourne supervised an experiment in the Bay Road Fruit Farm orchard in South Amherst, in which electric light traps were hung in the apple trees, to attract insects flying at night.

The fact has long been known that colling moths, among the most serious apple pests, and many other types of insects, are attracted to light. This fact has led to considerable investigation by entomologists of the possibility of attracting the insects at night to lights and then killing them by one means or another.

In the experiments in South Amherst, in which power companies cooperated with the college experiment station, two types of traps were used. One electrocuted the insects on a charged screen as they flew at the light; the other type of trap drowned the insects in a pan of water. The electrocutor traps proved to be twice as effective in killing insects.

Trees in which the traps were located had only slight injury to the fruit by colling moths or apple worms and as the distance from the light traps increased, evidences of colling moth injury increased, indicating that the traps were a means of reducing insect damage. However in their present stage of development, Professor Bourne does not feel that electric light traps alone are sufficient protection against orchard insects. He feels that their chief value lies in indicating the increase and decrease in colling moth population, to tell the fruit grower when he should apply his sprays and dusts aimed at keeping the pests under control.

"For the purpose of indicating the emergence of colling moths and their presence in the orchard," says Professor Bourne, "The new electric light traps are the most effective means we have yet found."

State Milk Board and Federal Milk License Cooperate

Under the terms of an order issued recently by the Massachusetts Milk Control Board, a specified price of 7¢ a quart must be paid to Massachusetts milk producers supplying the Boston market.

The decision of the State Board to cooperate to the fullest extent in the Boston market will greatly strengthen the stability of the producer price in that area.

Round About The County

March 29—May 10

On these Fridays Miss Grace B. Gerard will conduct two all day meetings at the Y. W. C. A. in Newburyport, starting at 10.30 A. M. The subject of her discussions will be that of home accounts.

April 3

Mrs. Ruth D. Morley, Child Care Specialist of the Massachusetts State College, will continue the second of a group of lectures on Child Guidance at Lynnfield Center on Wednesday, April 3rd at the home of Mrs. George E. Lambert, Jr.

March 27 —April 20

April 17—April 24

These Wednesdays will be devoted to a clothing class already started by Mrs. Mary M. McIntire, Home Demonstration Agent. The class meets at this School in the Extension rooms.

Clothing classes, also under Mrs. McIntire's tutelage, are continuing at the Essex County Tuberculosis Sanatorium on Mondays and Thursdays.

Mrs. Mary E. Roundy, Instructor of Home Nursing at this School, is supervising two home nursing groups in the county: one in Gloucester on Thursday afternoons and one in Newburyport on Friday evenings.

Roses

Roses have suffered quite severely this season due to the rapid amount of growth which they made last year and which did not harden off. This will mean that replacements will be necessary if you expect to hold your reputation as a rose grower. Replacement of roses should be ordered as early as possible now, although there is no question about an ample supply of these plants.

A. M. Davis

HERBS

(Continued from page 1)

two feet. The leaves are not over a quarter of an inch long and are pointed at the tips. It makes a delightful border plant and is used for bouquets. It is especially valuable in flavoring soups, and dishes including tomatoes and cheeses. This plant seems to like a well-drained, sunny exposure.

Sage

is one of the old friends. It is a perennial and can be obtained from nurseries or from cuttings rooted in sand. The plants grow from eighteen inches to two feet high. The leaves are grayish in color, dark olive and lighter below. The lavender-blue flowers come in late June and grow in a large raceme. The fragrance of sage is very noticeable. This is another herb which flourishes in a clay soil and prefers a dry situation. Sage is noted for its flavoring qualities and especially for stuffings in duck, goose, veal, and sausages. As a tea it is used to cure colds and sore throats.

Eggs, Meat Substitute

"A liberal use of protective foods in the diet helps to maintain the characteristics of youth."

Eggs, rich in minerals and vitamins, and an excellent source of easily digested protein, are classed as a protective food. Except for calcium and Vitamin C, eggs contain all the known substances which are necessary for growth. They are rich in protein, in four of the vitamins, in two of the important minerals and in addition they contain generous amounts of fat.

Uses of Laurel

Mountain laurel as an ornamental plant around the Massachusetts home is one of the finest plants which we have available. This plant can be quite successfully transplanted at any time during early April. I would suggest that you select good individual specimens growing in pastures and that you dig them up with as much of the root system as possible, that you be certain that the root system is kept moist, that you move them as rapidly as possible to the location where you are going to set them out, and that you plant them immediately. If those simple directions are followed you can be certain of getting good results in using laurel as an ornamental plant on your home grounds. These same suggestions apply also to the white birch, the red cedar, the common pasture juniper and other native shrubs which we should take advantage of as ornamental plants.

A. M. Davis

MASTITIS

(Continued from page 3)

himself provided, of course, he had had the veterinarian show him how to detect scar tissue. After making these three tests, one may then classify the cows and stanchion them according to their degree of infection. This is very important as diseased cows standing next to non-diseased cows will quickly spread the disease to the latter. Diseased cows should be milked last and scrupulousness should be the keynote in milking methods. Wet milking should never be tolerated as this quickly spreads the disease. If a proper program of control of chronic mastitis is carried out, one should have little trouble with acute "flareups".

Should the reader desire to delve more deeply into this subject of controlling chronic mastitis, he may do so by sending to the Cornell University Agricultural Experiment Station, Ithaca, New York, for Bulletin 579, "The Diagnosis and Control of Chronic Mastitis" by D. H. Udall and S. D. Johnson. Dr. Udall is considered the outstanding authority on mastitis in this country.

R. E. MacCleery

Spring and Gardens

At a recent meeting in Gloucester, Arnold M. Davis, horticulturist of the Massachusetts State College, pictured the development of home grounds as either an inviting or prohibitive sight to the eye.

Considering the grounds as a whole, a standard of simplicity, allowing the house to be tied into the property with garden plantings, should be maintained.

Having established a setting, the type of garden which will best comport with these surroundings may be determined.

Flower borders, regular or irregular, single or double, have been designed to make satisfactory gardens in themselves.

Formal, by-symmetrical gardens, may be happily established on the proper grounds.

Wall gardens, with the wall used as a background for tall flowers, and the head of the wall for low-growing plants, should be highly prized by fortunate owners.

Informal, old-fashioned gardens, blazing with colors which nod and dance in the sunlight are probably the favorites in New England.

Gates which say "Come in" and walks and paths which lead one on are garden features which make one's grounds express their owner's personalities.

Simplicity, above all, should be recognized by the wise gardener. Avoid cluttered complexities.

Among the plants suggested by Mr. Davis to be considered for their simple beauty and comparative facility to be grown are:

1. Viola Jersey gem, a perennial which continues to bloom throughout the summer if picked off like pansies—and is violet in color.

2. Iris christata, resembling little orchids, three and five inches high; good in shady areas.

3. Daphne cneorum, blooming May 12, and needing sour soil (peat Moss); very choice.

If you have trouble with bleeding hearts, try Dutchmen's breeches, its cousin. This must have shade.

4. Lupins, massed together, pink and white.

5. Hollyhocks, which should be dusted with sulphur to preserve leaves. Apply lime to soil in vicinity to counteract the sulphur which sours soil.

6. Delphinium and madonna lilies grown together; ideal; (Bordeaux mixture to prevent diseases).

7. Golden gleam nasturtiums.

8. Phlox which need plenty of food and water, and sulphur for control.

9. Michaelmas daisies; hardy and dependable in the sun.

10. Chrysanthemums.

These are some of the plants suggested by Mr. Davis which will give a continual blooming season from spring through fall.

Previous planning is vital to garden areas.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 16

HATHORNE, MASS., APRIL, 1935

NO. 4

Dairy Replacements In Essex County

When our new Commissioner of Agriculture, Edgar L. Gillett, puts forth his call for pioneers in this county to venture forth in a cooperative undertaking of the raising of dairy replacements between the eastern and western parts of the State, may we not all give him our whole-hearted support? When it is difficult to purchase satisfactory dairy cows in Essex County why should the low-priced land in the Berkshires, which once was used for the production of hay for horses in the city, not well be used for the raising of heifers?

In a recent address, Mr. Gillett stated that he feels that some agreement between dairymen in the eastern part and farmers in the western part of the state could be made whereby the former, instead of sending their heifer calves from high producing stock to the block could send them to the latter who would raise them on their farms. When the heifers would become old enough for their first freshening period they would be returned to the farmers from whom they originally came. Such a plan would give the dairymen of this county an opportunity to get disease-free stock and carry on their own breeding programs. No longer would they have to select their replacements in a hit or miss fashion. Instead, they would be able to select their own future cows just as they would were they raising their own replacements.

There seems to be every indication that dairy cattle prices will increase in the immediate future. From 1929 to January 1934, cow numbers increased 13%. During 1934 they decreased 4% and further reduction is expected during 1935, which quite likely will result in an increase in price in dairy cows.

In deciding whether or not to raise their own calves, Essex County dairymen should attack the problem from the long-time standpoint. If, for example, plenty of low-priced pasture land is available and there is an abundance of feed on hand with sufficient volume of business, it may pay to raise replacements. If, however, land is limited, and only enough roughage can be raised to feed 20 cows, let us say, it would pay to buy replacements rather than to decrease volume of business to take care of raising calves.

It is through the plan of Commissioner Gillett that purchasing re-

F. F. A.

The officers-elect of the Essex Chapter of Future Farmers of America who will hold office in 1935 and 1936, are:

President: Charles Clinch of



Retiring Officers

Back row, left to right: Joseph Andreas, Beverly; William Hayes, Swampscott; Charles Clinch, Swampscott; Leo Leonard, Lynn. Front row, left to right: Edward Bessom, Lynn; Kenneth White, Salem; Ruth Fairweather, Andover; Gilbert Greeman, Beverly.

Swampscott; Vice-President: Woodward Walker, Salem; Secretary: Lewis Norwood, Rockport; Treasurer: Stanley Bickford, Lynnfield; Assistant Treasurers: William Hayes of Swampscott and Elmore Smith of Lynn; Reporter: Norbert White, Lynn; Executive Committee: Kenneth White, Salem; Norman Peatman, Andover, and Joseph Lydon, Nahant.

Students elected from this Chapter to state offices are: Edward Bessom of Lynn, Secretary, and John Underwood, of Essex, Reporter.

The Future Farmers of America, a national organization, plays an active part in the agricultural field. Students in agricultural schools throughout the country are trained, through this organ, to meet farm problems. Each Chapter is so divided that groups of students may specialize in particular phases of agriculture. These groups meet regularly to discuss their separate problems.

Individuals, too, profit by this organization. A roadside stand connected with this School has been bought by the F. F. A. Association and is run during the selling season by students qualified to arrange and sell the products grown on the School farm. Henry Cooper of Lynn has been appointed attendant for the coming season.

placements would be made more easy for Essex County dairymen.

Russell E. MacCleery

Dahlia Growing

We are now approaching the season when people are beginning to talk about gardens and perhaps there is no plant that creates so much interest among the amateur gardeners as the dahlia. The countless varieties and the many different and beautiful colors of the blossoms ranging in size from pom-pom to large varieties, together with the fact that they begin to produce their blooms toward the first of August and continue to bloom until late in the fall, tends to lend a beauty and dignity to a garden that no other plant can produce.

Much of the success

in raising dahlias depends upon the time and manner in which they are planted. Too many amateur growers labor under the impression that dahlias should be planted as early as the month of April. This is a great mistake as the dahlia is distinctly a fall flower. The latter part of August through September and up to the middle of October constitute the banner blooming season for this plant. Dahlias planted before the 15th of May become fibrous in their stalks and produce small and inferior blossoms. The best blooms are produced from the sapling. Dahlias planted the latter part of May or as late as the second week in June when the ground is warm will grow so rapidly that it will prevent the stalk from becoming fibrous.

Dahlia tubers should never be planted in clusters. They should be separated with a fine thread saw in such a way as not to injure the crown which produces the sprout. Dahlia tubers planted without the crown will not grow. Care should also be taken not to break or injure the neck which supports the crown. One or two tubers in a hill are sufficient, preferably one. No more than two stalks should be allowed to grow from one tuber. One is better as the full strength will then go into the one stalk. To plant the dahlia properly a hole should be dug in well-loosened earth, a foot in width and a foot or more in depth. A stake should then be driven into the ground for the future support of the stalk. Ordinary horse or cow manure may be used as a fertilizer. This should be placed in the hole after the stake has been driven into the ground. Half a shovelful is all that is necessary. This should be patted down with the shovel and a layer of loam placed over it. Then the tuber should be placed on the loose loam, crown

(Continued on page 4, col. 2)

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Alumni Notes

Ashton Danforth, class of 1928, is owner and manager of a florist establishment in West Peabody.

Leila Wray, class of 1934, has recently been appointed attendant at the Danvers State Hospital.

Arlene Prescott, class of 1934, is employed at the Essex County Tuberculosis Sanatorium in Middleton.

Robert Bolcome and David Carter, both of the class of 1934, are gardening on private estates in Gloucester.

George Bulgaris, class of 1932, is employed by the Kelsey Highland Nurseries in Boxford.

Among recent alumni visitors at the school are: Parker Ryan, '24; Chester Hanson, '25; and Joseph Cote, '34.

Announcement has just been received of the marriage of Lillian Degenhardt, '32, to Franklin Sargent, of Wenham. Mr. and Mrs. Sargent are living on Perkins St., Wenham.

The engagement of Mildred Roberts, '34, to Stanley Beers of Danvers, was recently announced.

A daughter was born to Mr. and Mrs. Roger Amidon (Phyllis Wadsworth '33) early in April.

John V. McNair, class of 1931, is a leader in Company 143 at the CCC unit in Erving, Mass.

Franklin Edwards, class of 1934, was married on March 10, to Miss Anne M. Langley of Marblehead. They reside at 556 Essex St., Beverly.

Harold Nelson, class of 1921, is employed in Malden by the Frank B. Cyr Company, dealers in dairy supplies and equipment.

Harold Dowding, class of 1925 and President of the Alumni Association, was toastmaster at the Athletic Banquet held on April 3.

Athletic Awards

At the conclusion of the athletic banquet on April 3, letters and sweaters were awarded by Miss Moore, Mr. Mstrom, Miss Vrooman, and Coach Philip H. Couhig, to the following members of sports' teams:

Girls Basketball: (Letters) Captain Betty Johnson, Salem; Josephine McDermott, Danvers; Irene Burbeck, Salem; Hazel Ogden, Newburyport; and Claire Dooley, Salem. (Numerals) Manager Anita Granville, Marblehead; Ruth Caddoo, Newburyport; Mary Swiniarski, Peabody; and Freda Peterson, Newbury.

Boys Basketball: (Letters) Captain Joseph Spakas, Lynn; Manager John Monroe*, Andover; John Donahue, Lynn; Franklin Day*, Haverhill; Forrest Haynes*, Haverhill; Lewis Norwood, Rockport; Stanley Bickford*, Lynnfield; Gildo Santin, Beverly. (Numerals) Charles Clinch, Swampscott; Kenneth White, Salem; and Henry Perkins, Amesbury.

Football: (Letters) Captain John A. Donahue, Lynn; Manager William Daly*, Peabody; Lawrence McDermott*, Danvers; John Toomey*, Danvers; Captain-elect Lewis Norwood*, Rockport; Albert Collins, Danvers; Kenneth White*, Salem; Gildo Santin*, Beverly; Joseph Lydon*, Nahant; Norbert White*, Lynn; Christy Mavros, Lynn; Melville Low, Saugus; Donald Gasper, Beverly. (Numerals) John Fullington, Peabody.

* signifies the award of sweaters with letters.

4-H FIELD DAY

MAY 25

Calendar

April 26—4-H Food Contest, Home-making Building of this School.
April 26—Agricultural Department closes for summer project season.
April 26 to May 6—Spring vacation, Homemaking Department.
April 30—Farm Accounts meeting in Gloucester.
May 14—Garden meeting in Marblehead with A. M. Davis speaking.

Fair Dates

Summer weather may be on hand to greet the early fairs, the first of which opens in Nantucket on August 21. It seems doubtful now.

Topsfield's Fair will be held over Sunday and Labor Day this year, starting on August 30.

Brockton's dates are September 9 through 14, and Springfield will open on the 15th for one week.

Segreganset's Fair will run into the fall, closing the fair season on October 10 and 11.

Honor Roll

Agricultural Department

The third and final Honor Roll in scholarship for the present year in the agricultural department was recently announced. Starred names are those who have been on one or both previous rolls:

Norman Wood*, Amesbury; Ruth Fairweather**, Norman Peatman, Andover; Andrew Bye*, Gilbert Freeman**, Warren Towne*, Beverly; Mildred Hills*, Byfield; Eileen Stewart*, John Marshall**, Danvers; Lawrence Shanks, David Elwell*, Essex; Sargent Griffin*, Gloucester; James Gardella, Forrest Haynes**, Gilbert Wallace**, Franklin Day*, Charles Petengill**, Richard Colby, Haverhill; Joseph Blunda, Ipswich; Walter Licht, William Long, Augustine Sheehy, Francis Gillen**, Gerard Hamel*, Lawrence; Ernest Thayer**, Henry Cooper**, Huntington Howard**, Joseph Spakas, Philip Hamson**, Leo Leonard, Edward Bessom*, Vincent O'Donnell**, Elmore Smith**, Norbert White, Merle Graffam**, Frank Conti, Walter Hichens, Newton Goodwin, Lynn; Ralph Demuth, Melrose;

Lorin Clark, Merrimac; Archie Nimmo, John Shinner, Myron Eastwood**, Methuen; James Goodale, James Webster**, Middleton; Rene Deloge*, Howard Champion, Theodore Smolak*, Henry Smolak, North Andover; Victor Pohju*, Harvey Underwood**, Peabody; Lewis Norwood**, Rockport; Vincent Nelson**, Woodward Walker*, Warren Kneeland**, James Cashman, Walter Tataronis, Palmer Jones, Salem; Charles Donovan, Ernest Tarbox*, Saugus; Charles Clinch, Richard Estes*, Swampscott; Fred Scribner, Topsfield.

Special honor mention was made in a recent assembly of those members of the Senior class whose names have appeared on every scholarship honor roll which has been published since they enrolled: Ruth Fairweather, Andover; Ernest Thayer, Lynn; Vincent Nelson, Salem.

Others with very commendable records are: Philip Hamson, Lynn; Forrest Haynes, Haverhill; Walter Licht, Lawrence and Gilbert Wallace, Haverhill.

The Milch Goat

Charles G. Thomas, Essex County Goat Breeders' Assoc.

The origin of the goat goes back as everyone knows to the early Biblical history where we find her spoken of with particular reference to her cleanliness.

Sometimes history tells but little about her. She is sometimes spoken of as an important domestic animal, and one of the main food supplies of nations. In more recent years however the continent of Europe, Switzerland in particular, has devoted more attention to her and it is from Switzerland mainly that the best goats on this continent originated.

Breeds

The three chief breeds of milk goats in the United States at the present time are the Toggenburg and Saanen from Switzerland and the Anglo-Nubian. I hold no brief for any of these breeds, considering the selection of a good strain far more important than the question of breeds.

Apart from the recognized breeds there still is the inevitable scrub. The powers that be are making such strenuous efforts to wipe out this very inferior animal that the day is not far distant when it will entirely disappear. This, of course, is the hope of all who have the goat-raising industry at heart.

Milk Production

The average family milk goat should give from two quarts a day upwards when fresh and should continue to give a good supply of milk for at least nine months. There are many goats that give around a gallon and more a day, but it would not be wise to expect this from all goats advertised as coming from a gallon strain as it must be borne in mind that to give exceptionally high yield, goats are forced in their feeding so that the conditions under which these records are obtained are quite different from those in which the average goat is situated.

What's Ahead For Consumers

Retail food prices for the country are now 21.7 per cent above 1913 levels, 12.5 per cent higher than one year ago, and 34 per cent above two years ago, but they are 18.9 per cent below 1930 levels.

Prices in Boston average slightly lower, being only 10 per cent above a year ago, 30 per cent above two years ago, but 22 per cent below those of five years ago.

Food costs struck bottom in 1933 when they were slightly less than food costs in 1913, but total living costs were still 30 per cent above the 1913 level. No other item in the cost of living dropped as low as food in 1933.

Does Alfalfa Hay Effect Milk Flavor?

In the January 1935 issue of the "Journal of Dairy Science" there was an article in which the ensuing conclusions were made:

1. Alfalfa hay fed less than four hours before milking has a pronounced effect on milk flavor. The two hour interval caused the most serious effect.

2. The same precautions should be used in feeding alfalfa hay as are recommended for such feeds as silage. It should be fed after milking or not less than four hours before.

3. The intensity of the alfalfa flavor increases with the increase in the amount of hay fed.

4. The effect of the hay on the milk flavor was considerably less serious with Holsteins than with Jerseys.

5. Aeration of the milk removes some of the flavor but does not entirely eliminate it. Cooling seems to be ineffective.

Katahdin Potatoes

Much interest has been manifested in the new Katahdin potato and its adaptability locally. It is a seedling potato developed at Aroostook Farm, Presque Isle, Maine, under supervision of the Maine Agricultural Experiment Station.

In the spring of 1934 we secured two bushels of Maine grown Katahdin seed and two bushels of Vermont grown seed for trial along with our usual planting of Irish Cobblers and Green Mountain potatoes. Although last year was not a favorable season because of dry weather in the latter part of the growing season, we averaged a fair yield of good clean potatoes. In yield the Katahdin compared favorably with the two other varieties. They also kept through the winter fully as well. In actual cooking quality which consists with us of boiling and baking for table use we thought the Katahdin not quite equal to the Green Mountain. This one experience is not conclusive, for we have read other reports of growers who rated them very highly.

The Katahdin potato has been recommended as being blight resistant. We sprayed the Katahdins along with the other varieties and left the ends on several rows of each. All unsprayed portions suffered from flea beetle injury and blight followed. This experience checks with that of other growers who agree that the Katahdin is not blight-resistant but offers some resistance to other potato diseases.

The Katahdin potato is oval shaped, somewhat flat, and shallow-eyed, making a fine appearance. We intend to plant more this year for further trial.

R. H. Lewis '25
Andover, Mass.

Planting Schedule For Home Vegetable Garden

Many home gardens fail to yield a full measure of satisfaction because of too few plantings or planting at the wrong time. The following planting schedule if carried out should supply a well-balanced succession of fresh vegetables for a family of five throughout the harvest season with enough to can or store for winter use. The figures in parentheses indicate the number of lineal feet of row to plant for each preceding vegetable. Seeds are to be sown except where plants or sets are indicated.

April 10 to 15. Swiss chard, spinach, radishes, lettuce, beets, carrots, (25), peas, onions and onion sets (50).

April 18 to 25. Early cabbage, cauliflower and lettuce plants (50). Second planting of peas (50), spinach and radishes (25).

April 28 to May 2. Sweet corn, bush string beans (50). Third planting of peas (50); radishes and spinach (25). Second planting of beets and carrots (25).

May 10 to 15. Second planting of corn and bush string beans (50). Cucumbers and summer squash (25).

May 25 to June 1. Third planting of corn and bush string beans (50), beets and carrots (25). Set tomato plants (75) and pepper plants (25). Late cabbage and cauliflower (25) thinnings to be transplanted to (50") of each, July 10th.

June 10 to 15. Fourth planting of corn and bush beans (50); beets and carrots (25).

By this latter date the entire garden area should have been planted. Succession plantings may take the place of the earlier crops as they are harvested, as follows:

Late beans, beets and carrots, July 1 to 10 (50). Late cabbage and cauliflower plants, July 10 (50). Late lettuce, August 1 to 10 (50). Late spinach and turnips, August 10 and 20 (50).

The above plantings may be made in a plot containing 2750 square feet of land, 55' x 50', in 28 rows, each 50 feet long.

A. L. Dacy

A publication summarizing the study of governmental expenditures has been prepared by State College economists to display graphically the division of receipts from various sources, and the expenditures for various purposes.

The publication, listed as Special Circular No. 17, is being distributed to many government officials, and is available free of charge to any person interested. It may be obtained at the Extension Service, Massachusetts State College, located at Amherst, Mass.

Round About The County

April 30

The Gloucester garden club will meet on the evening of the thirtieth for the final garden talk of A. M. Davis, horticulturist of the Massachusetts State College.

May 3

On May third, Miss Grace Gerard will conclude her course of instruction in Home Accounts, at Newburyport.

May 9

The last of a series of meetings conducted by Mrs. Ruth D. Morley in Lynnfield Center will take place on May 9 at the home of Mrs. George Lambert, Jr. These meetings, on Child Guidance, have been well attended.

May 14

On the afternoon of May 14, A. M. Davis will again be in this county, in Marblehead.

During April and the first two weeks in May a group of twelve women are meeting on Fridays with Mrs. Mary M. McIntire, Home Demonstration Agent, for instruction in children's clothing.

Clothing groups which have been meeting on Monday evenings with Mrs. McIntire will continue through May 20.

Classes in garment finishes and clothing at the Essex County Sanatorium, conducted on Mondays and Thursdays by Mrs. McIntire, will end in June.

Mrs. Mary E. Roundy, a member of the School's staff, is conducting home hygiene courses on Thursday afternoons and evenings at the Gloucester Community House, on Monday evenings at Haverhill, and on Friday evenings at the Y. W. C. A. in Newburyport. Friday afternoons she devotes her time to the Tuberculosis League in Lawrence.

Herbs For Kitchen Garden

Don't fail this year to establish some herbs in your kitchen garden. Many of these may be raised from seeds and set outdoors directly into the garden area, or if you like, you can procure plants from any of the nurseries dealing in them, and raise them from plants. Personally, I believe it is much more satisfactory and more interesting to grow herbs from seed. You will find listed almost any number of herb collections or special types of herbs. Let me suggest in a garden area to be simply practical, that you grow thyme, sage, sweet marjoram, dill, and perhaps lavender, for effect. These will grow readily from seed and ought to give you a source of herbs to use in poultry dressing, etc., as well as a very interesting lot of plants for the garden areas.

A. M. Davis

Window Boxes

It is too early to plant window boxes now but not too early to plan them. First of all, get good deep boxes, improve the soil with fertilizer or by the addition of compost material to garden soil and after the boxes have been thoroughly painted both inside and out, put your soil in your box. Set the box up on the bracket and have it ready to plant. Around the first of May you can safely put geraniums, petunias, verbenas, and for a shady area begonias and fusias, in a window box and get good results.

A. M. Davis

Gloucester Women Active In Better Homes Project

A group of Gloucester women who met with Miss Grace B. Gerard, Home Furnishing Specialist, to study the features of a livable living room, will furnish a model living room at the National Furnishing Store, Gloucester, to be exhibited during Better Homes Week, April 29 through May 4. Mrs. Lillian C. Works, under whose supervision this project is being carried out, will be glad to welcome county friends during that week.

DAHLIA GROWING

(Continued from page 1)

upward and in such a position that the crown end of the tuber will rest near the stake so that as the plant grows the stalk may be easily secured to the stake.

Dahlia tubers should be planted from five to six inches in depth if not deeper so that a good foundation may be produced. Cover the tuber which has been placed in a hole six inches deep with two inches of loam and as the plant grows fill in around the stalk with earth to the surface.

When the fourth leaf has developed it is well, with the tall varieties, to snip the center out. This can be done with the thumb and forefinger or pair of sharp scissors. It causes the plant to throw out an increased number of branches and hence the number of blossoms will be doubled and tripled. The writer has frequently produced over one hundred blossoms from one tuber.

When planting tubers, set them four feet apart, that they may expand. The earth around the base should be kept well loosened, that the roots may absorb air and moisture. As the plants continue to grow the lower branches (suckers) should be pruned to allow the main branches to absorb full strength.

Dahlias should be well watered in dry weather, but not until after the sun is off them at night.

Watson A. MacCleery

4-H Style Reviews Starter April 20

From April 20 to May 25 more than a thousand girls, members of Massachusetts 4-H clothing clubs, will take part in county clothing rallies. All will be putting forth their best efforts and wearing their clothes in the best style in the hopes that their dress or costume will win them a trip to the state style review and then to the National 4-H Style Review in Chicago next fall.

Every one of the garments displayed will have been made by its youthful owner, and the list will include party dresses, street costumes, school dresses, sport dresses or suits, Sunday best dresses, and garments made from grain bags, flour bags, or similar material, or remodeled from another garment.

The state contest will be held at Amherst on June 1, and will include not only the style review but three other contests of a home economics nature. A baking powder biscuit contest, a home furnishing scrapbook contest, and a health poster contest will be held on this date. Miss Tena Bishop and Miss Marion E. Forbes, assistant 4-H leaders will be in charge.

The dates of the county style reviews are as follows: Bristol county, April 20; Hampden and Norfolk counties, May 4; Berkshire, Barnstable, and Essex counties, May 18; Plymouth, Worcester, Middlesex, and Hampden counties, May 25.

The Back Yard Gardener

Heard one of the State College men talking on the radio the other day and he said, "It's better to put a five-cent plant in a five dollar hole than a five-dollar plant in a five-cent hole." Y'know, I'll support that statement a hundred per cent.

It applies more to trees and shrubs than it does to the perennial flowers, but no matter what kind of a plant you set out, you want to put it in a hole big enough to accommodate the roots. And that brings up another thing: when you move a plant of any kind, you want to be sure to get as many of the roots as possible.

That's why it's better to move a little tree than a big one; the root system is smaller, and so when you dig it up you're likely to get more of the roots.

Most folks don't give the roots the attention they deserve when they go to move a plant. They don't see the roots and so they don't pay much attention to them. I've even seen people take a pair of pruning shears and trim off part of the roots of a plant they were transplanting. They left the top just as large as ever. What they should have done, if they did any pruning at all, was prune the top and leave the roots alone.

ESSEX FARMER AND HOME MAKER

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HATHORNE, MASS., MAY, 1935

NO. 5

New Produce Market Owned and Operated By Farmers

The marketing problem for the Essex County farmers has always been a serious one. Many of us can remember in the days of the horse drawn vehicles when the market wagon left home in the late afternoon from the Essex county farm, headed for the wholesale market at Faneuil Hall. Usually the farm owner was his own market man, and in order to properly sell his load it was necessary for him to be away from home 18 to 20 hours per day, catching what little sleep he could curled up on the seat box.

With the advent of trucks his problem has been even more complicated, and the number of hours spent in the market has not been greatly reduced. Congestion on the roads and in the market has caused the farmer to be a most serious competitor with his fellow farmers.

New Market at West Cambridge

Farmers have organized, elected a Board of Directors, and now the Boston Regional Produce Market, Inc., is a settled fact. On a tract of upwards of thirty acres in Cambridge, between Concord Avenue, Alewife Brook Reservation, and the Fitchburg division of the Boston and Maine railroad, a site will shortly be made available so that every farmer may become his own salesman and market his goods in the shortest most expeditious manner, with facilities owned and controlled by himself, conserving his interests at every turn. It is probable that the marketing hour will be materially changed so that the farmers may dispose of their loads in the late afternoon or early evening and have nearly his entire time at home on the farm where he can supervise and forward his farm operations and the growing and developing of his crops.

Scope

This market is to be so arranged that every type of agriculture will have its opportunity. Vegetable growers, fruit growers, dairymen, and poultrymen all will have their interests conserved. Facilities for commission houses to receive their goods and for produce dealers and general producer buyers will be ample as will all of the other facilities contingent to operating a large market unit. These will be available for use and service of farmers and the allied trades. It certainly seems that one of the most epoch-making periods in the prompt marketing of Massachusetts (Continued on page 4, col. 3)

Vitamin D Milk

"If Nature had foreseen that whole nations would come to rely upon the lacteal secretion of the cow for such a large proportion of its nourishment and had provided milk with an am-



Courtesy New England Dairy and Food Council

ple content of vitamin D, the problem of rickets prevention probably would never have arisen. Milk is most universally consumed by infants and children at a time when they have the greatest need for bone-building material. The fact that milk is rich in calcium and phosphorus and the further fact that vitamin D is required for the proper utilization of these minerals, make milk, because of its universal use, the logical vehicle for supplying vitamin D automatically when and where it is most needed. No other food presents the same opportunity or qualifies for the task in so many particulars.

That there is a fundamental need for an automatic food source of vitamin D does not seem to be open to question, when the problem is considered in its entirety. Public health presents a problem that is distinct from personal health. To those who are able to avail themselves of the known value of cod liver oil and viosterol there should be added the many who will be benefitted by a source of vitamin D which requires little or no volition or vigilance for its administration. Vitamin D milk promises to fill this need."

Norwegian Method Curing Legumes

There is an advantage in the Norwegian method of curing legumes over the American machine-curing mode. It cures the crop without rendering a brittle yield; no leaves are lost, and the green color is maintained.

The method consists in stringing wires across stakes eight feet long and ten feet apart. The wires are fastened to each stake by a turn around the stake, knee-high from the ground. With the hay hung on this wire, a second wire, twelve inches above the hay, leaving an air space between each wire, is strung. Four wires may be similarly lined up, if desired.

The field may then be raked, and the rakings placed on the wires. There is no further work until the crop is cured. The crop may remain indefinitely on the wires, but with clement weather the hay will dry in six or seven days.

Oats, field peas and vetch planted for soiling crop or to be cut and cured in the milky stage, cure very satisfactorily on the wires, and there is no better known way of curing soy beans, whether planted with millets or otherwise. It is ideal for curing alfalfa.

The important thing to remember is that the foliage stays green and does not get brittle.

(Excerpt from an article by Conrad Tronerud, manager of the Donnibristle Farm, Topsfield)

Wild Life Preservation

In his annual report, Secretary Wallace has said: "The land-utilization program affords a long-awaited opportunity to restore and increase valuable forms of American wildlife through the establishment of an extensive system of waterfowl refuges and the improvement of environment conditions for the birds."

Essex County marshlands, particularly in the eastern territory, are available to many farmers for use as a waterfowl harborage.

Already the Society for the Preservation of Natural Features of Essex County has established bird sanctuaries, giving that form of wild life the security of a habitat adapted to the requisites of bird life.

Individuals may promote the movement to restore and increase wildlife by converting their unused farmland into sanctuaries and groves of protection.

(Continued on page 2)

Essex Farmer and Homemaker

HATHORNE, MASS.

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Calendar

June 1—Meeting of all interested in
the new farmers' market, 3 P. M.,
on the site of market, corner of
Concord Avenue and Alewife Brook
Parkway, Cambridge.

June 5—Better Homes Day at this
School. Morning meeting at 10:30;
afternoon at 2:00.

June 8—Staff Picnic.

June 19—Parents' Day in the Home-
making Department.

July 23-26—Farm and Home Week,
Massachusetts State College.

Parents' Day June 19

At 11 A. M. on Wednesday, June
19, parents and friends of the home-
making department of this School
are invited to attend a program of
student participation.

An exhibit of foods prepared by
Junior and Senior class girls will be
displayed.

A play, imparting consumer in-
formation, will be presented, and
there will be story-telling by Senior
students whose child study courses
include the art of telling stories.

Box lunches may be eaten on the
campus, weather permitting and at

Students Employed On School Farm

Those boys employed this year on
the School farm, working under the
platoon system, are:

Charles Clinch of Swampscott;
Charles Standley, Beverly; Warren
Page, Middleton (Ornamental Gard-
ening); Roy Ford, Topsfield; Stanley
Bellwood, Archie Buder, both of Law-
rence; Elmer Aldrich and John Spen-
cer of Beverly (General Farm); Wil-
liam Whittaker, N. Andover; Walter
Tataronis, Ronald Gourley of Salem;
Philip Coles, Nahant; Sheldon Robin-
son, Peabody, Earl Deveau, Lynn
(Vegetable Gardening); William
Moore, Salisbury; James Nicoll and
David Rennie of Andover; Robert
Haskell, Salem (Fruit); Vincent Nel-
son, Salem (Dairy); Francis Gillen,
William Long of Lawrence; Russell
Wonson, Rockport; Mildred Hills,
Newbury (Green House); Walter Al-
ley, Lynn; John Fullington, Peabody;
William Hayes, Swampscott (Poul-
try); John Christensen, Saugus; Ed-
ward Bessom, Lynn (Fruit Nursery).

New Hampshire officials have a
hunch there might be some money for
eastern farmers in the herb business.
Imports of foreign herbs amount to
two million dollars (2,000,000) a year.
With five thousand dollars (\$5000)
of Emergency Relief Funds and the
help of twenty-six botanists, florists,
Pharmacists, chemists and other
technical experts, they propose to
find out if herb growing has possibi-
lities worthy of consideration.

Application of Princi- ples Basis of Learning

Practical work during the summer
has always been, and still is, a re-
quisite of vocational training in agricul-
ture. In fact, the home project meth-
od for putting to practice the class
room theories originated with the
state agricultural supervisor, Rufus
W. Stimson.

This School has been fortunate in
placing its students either on home,
or nearby farms. Even now, with
employment at low ebb, more than
90% of our student body has been
able to find some form of agricultur-
al work.

The School farm and grounds offer
opportunity to 30 students, either on
full or part time, to work under the
supervision of instructors. These stu-
dents are given comfortable lodgings,
and meals. A counselor is employed
to look after the welfare of the boys
when they are off duty. In a word,
the boys chosen to remain at the
School are given an opportunity to
spend an enjoyable summer and at
the same time meet their project re-
quirements.

2 P. M. a fashion parade will close
the program.

Alumni Notes

John Lombard, class of 1924, is
employed on the Kendall Farm in
North Grafton.

Alyce Sayles, class of 1931, is com-
pleting her last year at Hampton In-
stitute, Virginia.

Word has recently been received
that Cliffield Sewall, class of 1927, is
still working at the H. P. Hood Com-
pany in Lynn.

War Breaks Out In Vegetable Garden

Wars and rumors of wars which
flash through the news of internation-
al relations should cause far less wor-
ry to the gardener than the invasion
of the insect army which is already
starting in most home gardens. Ac-
cording to Grant B. Snyder of the
Massachusetts State College, insects
start their work on vegetable crops
just as soon as the vegetables begin
to grow, and some of the pests are
already taking their toll of the sum-
mer's crop.

The gardener who wakes up in the
morning to find his cabbage plants cut
off at the ground realizes for the first
time that the cutworm division of the
insect army has arrived. Cutworms
attack most vegetables, but are usu-
ally most serious in cabbage, cauliflow-
er, tomatoes, peas and eggplant. The
control for cutworms is to distribute
a poison bait over the garden. The
bait is made from a peck of bran,
mixed with one-fourth pound of Par-
is green, with about a pint of molas-
ses and a gallon of water added to
make the mixture moist.

Flea beetles attack eggplant, pota-
toes, beets, and several other crops.
Spraying the plants with Bordeaux
mixture and calcium arsenate or lead
arsenate is the recommended control.
Bordeaux mixture is made by dissolv-
ing copper sulphate and lime in wa-
ter. It is also effective in protecting
most vegetable crops against dis-
eases.

Aphids or plant lice may appear on
almost any of the garden crops with-
out notice. They can be controlled
only by a spray which kills the pests
by contact, and the one usually rec-
ommended is nicotine sulphate.

WILD LIFE PRESERVATION

(Continued from page 1)

Farmers may learn what founda-
tion has already been laid for the
utilization of farm land in wildlife
conservation, by reading Farmers'
Bulletin No. 1719, entitled "Improv-
ing the Farm Environment for Wild
Life", obtainable through the United
States Department of Agriculture,
Washington, D. C.

New Milk Grades

The Milk Regulation Board according to Chapter 263 of the acts of 1933 provides for the following grades of milk:

1. Milk—raw; 2. Milk—pasteurized; 3. Grade A Milk—raw; 4. Grade A. Milk—pasteurized; 5. Special Milk—raw; 6. Special Milk—pasteurized; 7. Certified Milk—raw; 8. Certified Milk—pasteurized.

New Requirements

The bottle must comply with regulations of the Division of Standards of the Department of Labor and Industries.

The cap (whenever any reference is made to it) shall be one that completely covers the pouring lip of the bottle.

All dairies are required to have a certificate showing compliance with the State Milk Regulation Board's requirements. Raw milk shall not contain over 400,000 colonies of bacteria per cubic centimeter and must be delivered to the consumer within seventy-two hours of drawing from the cow.

Pasteurized milk must contain not over 40,000 colonies of bacteria per cubic centimeter after pasteurization and must comply with State regulations as to pasteurization requirements. Machine capper must be used.

Grade A raw milk shall be 4% butterfat and 12.2% total solids. It shall not contain over 100,000 bacteria and must be delivered within forty eight hours after drawing. The hair, udder, and flanks shall be clipped, the pails hooded, and the milk shall be bottled not more than twenty hours after drawing. A cover cap will protect the pouring lip of the bottle and the cap will denote the day of the week the milk was bottled.

Grade A pasteurized milk will meet the requirements listed for Grade A raw milk with the exception that the bacteria count will not exceed 10,000. The cap will show the day it was pasteurized.

Special raw milk is variable as to butter fat. It must comply with state standards. The bacteria count shall not exceed 50,000. The milk shall be delivered to the consumer forty-eight hours after drawing. The cap must show the day of the week the milk was produced. Two barn inspections will be required and each person who handles the milk must have a medical examination and be free from Tuberculosis, septic sore throat, diarrhea, dysentery and must not be a typhoid carrier. The herd of cattle must be free from TB.

Special pasteurized milk must specify on the bottle cap the minimum per cent of butter fat (not less than state standard.) The bacteria count shall not exceed 5,000. The day of the week the milk is pasteurized must be specified. In all other respects this milk shall comply with the special raw milk requirements.

The state department of agriculture or the county agent will furnish

Poultry Tattooing

Poultry thieving is increasing in Massachusetts.

A plan to decrease the percentage of stealing has been suggested for Massachusetts poultrymen. The Departments of Agriculture and of Public Safety are cooperating to make this plan, which has proved successful in New Jersey, effective in its purpose.

Tattooing

as advocated by the department of agriculture is an assured method of permanent marking. It is practically painless and takes but very little time to apply. The method, in short, involves marking, with a metal punch, the web of the left wing of any bird over eight weeks old. (The left wing is preferred, in order to provide a uniformity for the aid of state police who are determining the identity of stolen birds.)

State police will have a record of every poultryman registered as using the tattoo method. The poultryman's application, made out in duplicate form, containing a description of his farm, its location, and his tattoo number will be filed at the state barracks nearest to its property. In the event of stolen birds, the poultryman may solicit the immediate assistance of the police.

It is felt that the tattooing program will give Massachusetts poultrymen a practical means for protection against poultry thieving. Arrangements have been made for poultrymen to purchase tattoo outfits through the Secretary of local or county poultry associations. It is not necessary that they be members of the association. For detailed information concerning prices of the tattoo outfit, (which are small), write to Stanley Bennett, Secretary of the Essex County Poultry Association, Hathorne, Mass.

For further information concerning the tattoo program, apply to Howard Whelan, Poultry Inspector, Division of Dairying and Animal Husbandry, State House, Boston.

Transplanting

This is a good season of the year to do transplanting in the garden. You should be through by June 1, however. If you have perennials which have been planted in your perennial border, why not take them up carefully with a good shovel of soil and move them to a new location. They will probably continue to grow and bloom as though they had never been transplanted and you will have an excellent opportunity for adding fertilizer to your soil and also thinning things out for more successful results with the coming season.

copies of these new grades upon request.

F. C. Smith

Called To Your Attention

During the past two years the consumer's food cost increased 38 per cent. This increase made possible an advance of 95 per cent in the income of farmers during the same period of time.

Rural retail sales in February were about 12½ per cent larger in dollar volume than for February 1934 and 61½ per cent above the same month for 1933.

Only about 1-3 as many farmers requested the aid of the Farm Credit Administration in helping them to avoid foreclosures of their farms during the last half of 1934 as during the first half of the year. A total of 22,667 requests for aid were received in the first half of 1934 compared to only 8, 314 such requests during the last half of the year.

The number of farm bankruptcies declined 20 per cent during 1934 compared to 1933, according to figures released by the Bureau of Agricultural Economics. The decline in farmer bankruptcy cases for the year was surpassed only by the decline of 36 per cent in cases involving merchants. Although bankruptcies are not used frequently as a method of settling farm debts the trend is considered significant.

The country is now experiencing a credit inflation. Such inflation always precedes price increased business activity.

One-third of the consumer's dollar is spent for food. However, only 13 cents of these 33 cents spent by the consumer reaches the farmer. The common interest of the farmer and consumer is to reduce and share, through increased efficiency of processing and marketing, part of the spread which is now paid to processors and distributors.

Volume of Business in 1935 is expected to average about 9 per cent higher than in 1934.

Ellsworth Bell,
Assistant Extension Economist,
Amherst

Farm and Home Week

Farm and Home Week at the Massachusetts State College has been announced for July 23 to 26, inclusive. Sixteen subject matter programs are being planned: general homemaking, food preservation, Parent-Teacher Association, Grange Day, school of the flower show, home flower gardens, nurserymen, fruit growing, lawns, cash crops, vegetable production, beekeeping, seedsmen dairy, and poultry.

Numerous entertainment features are being planned.

Complete programs will be sent to all those requesting them.

Is Your Child Happy?

A Basic Sense of Security was the subject under discussion at the last of a series of meetings conducted in Lynnfield Center by Mrs. Ruth D. Morley, Child Care Specialist.

From the time of birth the child strives for a state of equilibrium, both physically and psychologically. Delinquent cases have often been traced to lack of this sense of protection in childhood.

Most valuable among stabilizing influences over children, on the part of the parents, is the element of harmony in the home: complete and sympathetic understanding between parents. A child's sense of security is undermined by discord among those people who are guiding him.

Self-reliance and a feeling of adequacy should be instilled in children at a very young age if the import of confidence is to be felt by the child. A happy way of developing a feeling of sufficiency is to allow a child to enter the family plan and feel that he is an accepted member of the family group.

The value of regularity in habits cannot be minimized as adding to a child's sense of security. It is not necessary to make an issue of ordinary measures such as naps, meals and bed time, but it is important that they be carried on, punctually, at regular times.

And so—if a child's life is to be a full one—let it be free from fear and insecurity.

Better Homes Day

Women of the Essex County Extension Service, and their friends, are invited to attend the Better Homes day program on Wednesday, June 5, at this School.

Annually this day is set aside by the Home Demonstration Agent and her assistants. It is becoming a day anticipated by those women whose interests lie in the work carried on by the Extension Department of Essex County, in the School with its spring bounty of blossoms and maturing fruits, and in the topics of the times as related by morning and afternoon speakers.

Philip E. Whittemore of the Federal Housing Administration will explain, this year, the housing program, at 10.30 A. M..

In the afternoon, at 2.30, Dr. Charles E. Small, of Lynn, will discuss "Economics of the Present Day."

Children will be entertained and cared for by students of the home-making department.

Guests are requested to bring basket lunches which may be enjoyed on the School campus.

The date: Wednesday, June 5.

BETTER HOMES DAY

JUNE 5

Flowering Shrubs

Many of our spring flowering shrubs have now completed their spring bloom. This is the best season of the year which the gardener will have to prune these plants and get them into good condition so they can be in blossom. First, have a pair of good sharp pruning shears. The secret of success in pruning depends on having sharp shears, or a thin bladed saw, which is sharp so that cuts can be made quickly and smoothly. Remove the wood that you are taking out from the bottom, rather than clipping it off from the top. Take out all of the old wood. This, of course, applies to the oldest wood and I would take out 1-3 of the wood of each of the flowering shrubs. Weak shoots can be cut out and if the plant is out of bounds that is growing too tall or growing sideways I would cut back the parts to the shape which I desired. Remember in pruning your shrubs that you are not going to get results by simply giving the top of the plant a barbering or haircut.

A. M. Davis

National 4-H Camp Delegates

National 4-H camp delegates

Official announcement has been made as to the members of the Massachusetts delegation to the National 4-H Camp in Washington, June 13 to 19. Each year four young people are sent to the camp. The delegation this year includes Nellie Kut of New Bedford, Dorothy Kohler of Greenfield, John Camara of Oak Bluffs, and Alfred Cipolla of Haverhill.

Alfred Cipolla, representing Essex County, has been actively engaged in club work for 10 years. Each year he completed at least one project and most of the time it was two.

He is President of the Essex County Service Club. He was on the County Poultry Judging Team which won the State Contest at Boston at the Poultry Show in 1932. He is at present a leader of a local club. He is enthusiastic and a hard worker. The County Club Agent, Horace J. Shute, believes that he will make a very fine delegate from this state.

Accompanying the young people to Washington will be Miss Tena Bishop, assistant state 4-H leader; George L. Farley, state leader of 4-H work at the Massachusetts State College; and Miss Frances Andrews, assistant county club agent from Franklin county.

During the week at the camp the delegates will be given opportunities to visit places of historical interest in and near Washington and also will have regular class hours at which they will discuss problems confronting the 4-H club people. The trip to the national camp is one of the highest honors which 4-H club members in Massachusetts may receive.

The Care of Tulip Bulbs

The care of tulips when they are through blooming is one of the problems which the home gardener is troubled with. There are two ways of attacking the problem. First, the bulbs may be left in the location where they were planted and have nothing done to them, with the hope that they will reappear next year. In most locations, however, this sooner or later results in the loss of the bulbs.

I would suggest this method of care. As soon as the bulbs are through blooming the old flowers should be removed and then prevented from going to seed. The leaves are allowed to develop until they take on a yellowish gray color which indicates that they have completed their usefulness and are ready to die. At this time, by using a spading fork, the ground can be loosened and with the top still attached to the bulb, the bulb can be gently pulled from the soil. In most cases you will find that where you had one bulb before, you have two bulbs now. If the soil was well fertilized in the fall when the bulbs were planted, the new bulbs will be good and large. There may also be one or two small bulblets attached to these bulbs. I would suggest that the bulbs with the tops attached to them and without shaking the surplus soil from them, be placed in a shallow box or flat. They are allowed to cure out in this container which may take from two weeks to a month. Around the first part of July the bulbs should be sufficiently cured so that the old foliage and tops could be removed, the bulbs sorted over and those which are large enough to bloom next year saved by storing them in a dry location for planting some time in October. Bulbs which are too small can be disposed of by throwing them away, or if one is interested in building up a supply of tulips the small bulblets should be lined out in a straight row in the vegetable garden in a rich soil and allowed to remain dormant until next spring at which time you will find that they have increased considerably in size and in two years should be blooming size.

Arnold M. Davis,
Horticulturist

PRODUCE MARKET

(Continued from page 1)

grown farm produce is at hand. Unquestionably the Essex county farmer will ally himself with and benefit proportionately in this outstanding new enterprise.

PARENTS' DAY

JUNE 19

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 16

HATHORNE, MASS., JUNE, 1935

NO. 6

It's Always Fair Weather

It is not unusual for a young lady to have a vegetable or a flower garden but to combine the two and give equal attention to each is not so mon. Such is the case with Miss Ruth Fairweather, daughter of Mrs. Margaret Fairweather of Andover, who for two summers has successfully grown as many as fifteen kinds of vegetables and thirty different kinds of flowers including eighty varieties, on a half-acre tract of land in the rear of 115 Summer St.

Miss Fairweather is a senior student at the Essex County Agricultural School and ranks second in a class of forty-three young men. In competition with the young men Miss Fairweather was chosen secretary of the Essex Chapter of Future Farmers of America, a position which she filled admirably. In March 1935, she was elected Editor-in-chief of the student publication, "Green and White", in recognition of her literary ability and faithful work on the magazine staff. She also won the second Bauer prize for agricultural accomplishment in 1934. The enthusiasm and interest which this young lady exhibited in school work is now transferred to her garden activities.

One can grasp a just idea of her work by reading the reports she sends each week to the School. There are interesting accounts of her battles with witch grass and stones. Sometimes even the family cat is a handicap in the raising of flowers. The adversities of a commercial grower are also hers as her young seedling plants which she raises for sale are often attacked with mold and the fungus called "damping-off". This season another bogey has appeared to cause her some concern. Three lots of corn were dropped into hills but each time the pheasants made a feast of the plantings. And to cap the climax, just at the planting season Miss Fairweather was stricken with the measles. However, she was soon working again from thirty to forty hours a week, wrestling with her problems: witch grass, rocks, "damping-off", and the pheasants.

It is safe to predict that Miss Fairweather's garden will be a success as she is applying the latest control measures and sound common sense to her problems.

New Athletic Field

Friends of the School, as they learn of the plan of our having a new athletic field, become daily more and more enthusiastic over the prospect. Already the Buildings and Grounds Committee of the Trustees have pass-



APPLE BLOSSOM TIME
AT ESSEX AGGIE

ed favorably upon the plans and they now go to the Board for action. We have received splendid assurance from Mr. Connolly, the County E. R. A. Administrator, that the project will probably receive favorable attention and that Government funds will be available to assist in the work. The County Engineer's Office is preparing plans and blueprints for the project.

The site selected is east of the farm road and is within 700 feet of the main building. It is proposed to lay out, grade, and finish a field of approximately four acres. This will allow room for a regulation football field and a baseball field, and also room for a cinder track and tennis courts. Surely it seems as though the wishes and ambitions of staff, alumni and students will shortly be realized.

We hope in the next issue of the Farmer and Homemake to give more details of the plan.

Summer Studies in Flower Gardening

Summer is the time when we may best observe pleasing combinations of plants in herbaceous borders wherever we may journey. Home garden-

ers are striving to bring annuals, biennials, and perennials into harmonious relationships as to color, form, height and texture. Much can be learned and made use of in our own gardens if we will but sketch roughly in a notebook each composition that appeals to us as applicable to our home situation.

A mere ground plan of pencil lines with the plant names written in will preserve each picture until rearranging time arrives. How valuable too are the notes we make on unfamiliar and desirable kinds and varieties as the season moves from Iris, Peony and Delphinium time on to the autumn procession of Heleniums, Asters and Chrysanthemums. We may remember but are likely to forget the plant we most need to complete some garden picture.

Still another summer garden habit is that of reading about nature's weekly offering of bloom. Regular gardeners devote much time to reading during the winter, but how much more vividly do the observations of others appear when compared with our own first-hand contacts. Reading and re-reading everything we can lay hands on concerning Delphiniums, for example, while we may study Delphiniums in bloom and talk with Delphinium devotees will extend our understanding of the culture and artistic adaptation of these "aristocrats" of the garden to an extent which will surprise even ourselves.

Lilies likewise offer an incomparable field for summer studies in garden and book. And so the sources of the student gardener are without limit.

H. Linwood White

REMEMBER FARM

AND HOME WEEK

AT AMHERST

JULY 23-26

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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Calendar

July 23 through 26—Farm and Home
Week, Amherst.
August 30 through September 2 —
Topsfield Fair.

Farm and Home Week

With seventeen special programs
and a long list of entertainment fea-
tures, the annual Farm and Home
Week of the Massachusetts State
College promises to be the best ever.
It is seldom that so many noted
speakers with vital subjects appear
on a program during a period of four
days. It would seem worth while, for
our rural folk particularly, to make
an extra effort to attend. Neighbors
could ride together and share the
travel expense. In some communities,
it might be possible to get enough
people together to hire a bus.

Room accommodations in Amherst
are very reasonable. Camp sites are
many, pleasant, and free, with water
and other facilities close by.

Complete programs are available
and may be secured by writing the
Extension Service, Massachusetts
State College, Amherst.

Alumni Notes

Edwin and North Platte Sherrill,
former students of this School in
'29 and '30, are farming on a twelve
hundred acre wheat and corn ranch in
Nebraska, two-thirds of which is under
irrigation.

Janet McCrone of Amesbury, class
of 1934, is assisting in the kitchen at
the Essex County Tuberculosis Sanato-
rium.

Esther Belair, class of 1930, is em-
ployed at the Little Red School House,
a tea room in North Andover.

Dora Winchester, class of 1934, is
letting no grass grow under her feet.
On the Lynn Fels Parkway in Saugus
she maintains a roadside stand, a gas
station, and cares for two gardens,
commuting from her home, one and
one-half miles away, on her horse.

The parents of Janet Brander, a
former student in the homemaking
school, have recently announced Jan-
et's engagement to William Frederic
Hartwell of Malden. They will be
married on October 12 and after their
marriage will reside in Malden.

Kathleen Connelly, class of 1930,
will graduate on September 6 from
St. Joseph's Hospital, Lowell.

Bigger and Stingless Bees

At his laboratory near Vincennes,
Indiana, Jay Smith has developed
bees that won't sting, that produce
more honey and build larger combs;
insects that promise to add millions
to the agricultural income of the
country. Thirty years ago he started
an apiary as a hobby, with one hive.
Today he is the foremost producer
and exporter of quality queen bees in
the United States. In addition, Smith
is carrying on microscopic experi-
ments—fertilizing queen bees arti-
ficially—which promise to revolution-
ize an industry as old as civilization.
Scientists at the University of Cali-
fornia, reporting on swarms of bees
from 19 breeders found that Smith's
bees produced sixty pounds more
honey than the average from other
swarms; that his queens had ten ad-
ditional egg tubes, and that a pound
of his bees contained an average of
263 fewer bees. "Larger bees," Smith
explained, "can carry heavier loads
and travel greater distances. Ordinary
bees work up to distances of 8½
miles. I see no reason why we can't
breed bees to go twice as far. And
if we can produce honeybees as large
as bumblebees, they can work those
flowers which have nectaries beyond
the reach of the present insects, and
thus tap new sources of honey.

Reservations for rooms may be
made in advance. Write to the same
address.

Friends in Essex County are urged
to visit the State College during
Farm and Home Week. The dates are
July 23 to 26, inclusive.

Parents' Day

Two hundred and fifty parents and
friends of the homemaking students
of this school were the guests of
Miss Moore and her department on
June 19.

The entire day's program was one
in which the students alone partici-
pated.

Exhibits of the work created by
students during the year were not
the least in the interests of the day.

Demonstrations of biscuit and sand-
wich-making were carried out skill-
fully and in a professional manner by
Gertrude Lawton of Methuen (assisted
by Agnes Burke of Methuen), and
Ruth Hall of Saugus, (assisted by
Vera Hunnewell, also of Saugus).

Story-telling in the afternoon by
Dorothy Bruce, Genevieve Pasquale,
Betty Cole and Dorothy Lowe led up
to a cleverly written play entitled
Roberta's Gown Shop, which provid-
ed an opportunity for the students to
model the dresses they themselves
had fashioned during the school year.

Mrs. Harold Mostrom, Mrs. C. M.
Wood, and Miss Lillian Richardson
awarded honors to the B division in
foods for their well appointed lunch-
eon tables. (The food looked delect-
able!) Division A also had provided
luncheons for exhibit purposes which
looked equally tempting to the un-
trained eye!

Tea and sandwiches prepared and
served by the students brought to an
end a pleasant day.

Nuptials

Friends and graduates of the School
will be interested to learn of the mar-
riage of Coach Philip H. Couhig, on
June 8, to Miss Beatrice Stevens of
Yellow Springs, Ohio.

Announcement has been made of
the marriage of Miss Adeline Tem-
pleman of Saugus, to Ralph Harrison
Pingree of Clifton, on Saturday,
June 22. Mrs. Pingree has been at-
tending the homemaking school this
year.

June fifteen was the date chosen by
Miss Priscilla Murney, a former stu-
dent of the homemaking department,
for her marriage to Marshall Ryno
of Salem. Mr. and Mrs. Ryno, after
returning from a wedding trip in
Maine, will live on Cherry Street in
Danvers.

Echo Club Elects New Officers

The following girls were elected
June 14 to hold offices in the Essex
County Homemaking Organization
during the year 1935-36: President;
Rita Pasquale, Lynn; Treasurer: Bar-
bara Clark, Lynn; Secretary: Helen
Lucas, Peabody.

Round About The Dairy Farm

LOW COUNT MILK

Now that good old summer's here, we've got to be on our toes to produce low count milk. We're all agreed that lightning doesn't send large showers of bacteria into milk and we know now that milk, unless properly cooled, is likely to greatly increase its bacteria count because of the heat which usually precedes a lightning storm. Therefore, since some of us who are cooling our milk to 50° F. or below, immediately after milking and are carrying out a control program for the control of mastitis still get a high bacteria count, we must be contaminating our milk with unclean utensils. Strange, isn't it, when we consider that low count milk is dependent upon the cow, the cooling and the condition of the utensils and that the latter is the most easily controlled? The cheapest method of sterilizing cans, buckets, and containers is by the use of a chloroline solution just previous to milking. Pour a solution containing 100 parts chlorine to 1,000,000 parts solution into the milking bucket. Rinse the bucket and then pour the solution through the strainer into the can. Place the lid upon the can and shake the can well. Pour the contents into the next can and do the same with the other cans until they have all been rinsed. Use the remaining rinse to wash the milker's hands and the cow's udders and dry thoroughly. Such a program should materially reduce your bacteria count.

SUDAN GRASS

Don't let your cows get poisoned with sudan grass. It has been known to happen, especially when cows have been fed wilted sudan grass or hay that has become wet. Prussic acid, a deadly poison to animals not accustomed to it, may develop in sudan grass. For that reason it is best to take precautions when first turning the cows on sudan grass. Better try a couple of the poorer cows on the sudan grass pasture for a day or two before you turn in the whole herd to make sure that there is no chance of poisoning. If you have no poor cows and don't want to take a chance on losing any, feed each of your cows one or two pounds of corn and cob meal daily while they are being pastured on sudan grass.

TWO GRASS HAY CROPS

Two crops of grass hays have two advantages: first, early cut hay will contain eight per cent or more protein; second, it is much more palatable.

LONG-LIFE SILOS

Why not let your wooden silo live to a ripe old age by keeping it from drying out this summer? This is easily accomplished by painting the walls inside and out with oil.

85 BARRELS OF MILK

½ TON OF FAT IN YEAR

No, that's not the production of

Forestry Facts

A white pine crop may be safeguarded if all currant and gooseberry bushes for a distance of 900 feet are pulled up. Blister rust on pine is transmitted only to currant and gooseberry bushes. It cannot spread direct from pine to pine.

Because Massachusetts consumes vastly more timber than she produces, this State should maintain town forests. In Massachusetts the town is the political unit which plays the important role. Town forests in Europe have existed for several hundred years and the best proof of their success is the fact that the cities and towns are still buying more forest lands for that purpose.

Read Extension Leaflet No. 47 entitled "Repairing Storm-Damaged Trees" for sound fundamentals on this question. It may be obtained, gratis, through the Massachusetts State College.

The Harold Parker State Forest located in Andover, North Andover, North Reading and Middleton, is easily accessible from state highways in Andover and Reading via Salem street or the Haverhill turnpike. Company 110 of the CCC's has completed its work on this reservation with new roads, ponds, and picnic grounds to their credit. Visitors are welcome at any time in the park.

Pills For The Garden

A new circular entitled "The Garden Medicine Chest", containing a list of materials recommended for use in controlling insects and diseases which attack the ordinary flower garden and other ornamental plants, has just been prepared by Arnold M. Davis, extension horticulturist of the Massachusetts State College.

three or four cows, but just one. She's called Femco Johanna Bess Fayne, and is a member of the Holstein breed. She's just been made the new champion of the United States with a 365 day record of 32,727.1 pounds of milk and 1,220.4 pounds of fat. She's owned by Femco Farms, Minnesota. It shows what can be done and many farmers have a long way to go before they can get the average of their herds up to even one-third the production of this champion.

Why not start to bring up the average now by culling out the low-producing cows? Of course, the only scientific method of culling is by use of records. Better plan to join the Essex County Dairy Record Club, find out your low producers, get rid of them, and increase your income. For further information about the club, get in touch with County Agent F. C. Smith at this School.

R. E. MacCleery

Discussion Groups For Farmers

Farmers are travelling new roads. At each fork or by-road they question which turn to take. Formerly, John Smith thought in terms of yield per acre, or the amount of milk per cow, or bushels per tree. The rainbow prosperity collapsed. Instead of "food will win the war" slogans there are "Controlled Production", "Domestic Allotment", "Processing Taxes", "Marketing Agreements", "Planned Economy", "Erosion Control", "Rural Rehabilitation", "Foreign Trade Agreements", "The Rubber Dollar", "Submarginal Land", and "The Forgotten Man". John Smith's wife, with their lowered income, feels like the forgotten woman.

These problems tax the best of minds. On John Smith's ability to think clearly and to bring his influence to bear for sound policies, hinges the success of democratic and sensible solutions.

Throughout the State, farmers have been meeting to discuss these problems of adjustment programs, farm prices, and taxes. They used to talk them over at the blacksmith shop and the cross-road store. In the absence of these meeting places, the County Agents and State College men have been organizing discussion groups throughout the State, in Plymouth, Barnstable, Bristol, Norfolk and Middlesex Counties. There, they have been interesting and constructive.

Some of the topics under discussion are:

1. What kind of foreign trade policies do American farmers want?
2. Is it in the interest of the nation to have more, or fewer, people living on the land?
3. What share of the National income do you think farmers should have?
4. Should farm production be controlled on a long time policy?
5. What kind of land policies should our government maintain?
6. What cooperation and obligations have farmers and consumers?
7. What type of rural life can we anticipate for the United States? for Massachusetts? for Essex County?
8. Is the farm laborer getting a square deal?
9. What is a desirable tax system?
10. What constitutes sound cooperation? Will cooperation solve the farmer's plight?

County Agent F. C. Smith of the Extension Department at the Essex County Agricultural School is planning meetings to be held in Essex County next fall if there is significance of a desire for them among farmers. There will be approximately ten meetings. Everyone will be given outlines and literature for study.

The course will be free and anyone interested in it is requested to notify the County Agent, Hathorne.

Staking Perennials

With the taller growing perennials and some annual plants such as dahlias, staking the plants up to insure the effectiveness of bloom is a desirable practice. Stakes 3-4 of an inch square and from five to six feet long driven into the ground from 12 to 18 inches and while they are very heavy are a very practical type to use. These will give the plant the necessary strength to withstand wind and other forces which knock the plants over. In tying the plants to the stake first tie the string or raffia, whichever is used, with a hard square knot to the stake so that it is firmly secured to the stake. Then tie a loose loop around the plant. In this way there is no danger of cutting off the flow of sap when you stake the plant. At the same time this loop will give the plant plenty of leeway for normal wind action and all the support it needs in the case of severe blows. Hollyhocks left unsupported or not against the background actually require this type of support for best results.

A. M. Davis

M. M. McIntire and F. C. Smith To Broadcast

Mrs. Mary M. McIntire, Home Demonstration Agent, will be on the air July 9 at approximately 12:45 (Stations WBZ-WBZA). Her subject is to be "When Clothes Get Stained".

The County Agent, F. C. Smith, is also scheduled for the Farm Hour program on the same date, and will discuss the topic "Balancing Farm Production." His broadcast will directly follow that of the Home Demonstration Agent.

Eliminate Dead Blossoms

In the care of flowering plants, one of the tests of a good gardener is his or her ability to remove all flowers. This applies particularly to the perennial plants. The reason that this practice is so desirable is because it helps materially to check insect infestations and also in some cases it assures of a second crop of flowers. In the case of delphiniums this is quite important. Old flowers cut off as soon as they are through blooming so that the plant does not have a chance to go to seed, will in practically every case cause the plant to send out shoots from which will develop spikes which will bloom again in September. It has long been argued whether or not this is a desirable thing to do, although most gardeners seem to feel that it in no way interferes with the length of life of the plant.

Arnold M. Davis

Summer Radio Schedules

Farm Forum

Discussions of current agricultural topics by agricultural specialists of the Massachusetts State College will be broadcast throughout the summer on Mondays at 12:45 over Stations WBZ-WBZA.

The Hubbard Family

At 1.05 P. M. over WBZ-WBZA the Hubbard Family will solve homemakers' problems, also on Mondays.

4-H Club Program

Saturdays at 1.00 the "WBZ 4-H Club" will continue its dramatic sketches by club members with talks by club leaders and agents, and friendly chats with "Uncle George" Farley, state leader.

Farm and Garden Chats

Farm and garden chats are heard daily over Stations WHDH at 11.30, WAAB at 12.30, WMAS at 1.00, WLLH at 2.45 and WNBH at 11.30. Mondays are devoted to fruit; Tuesdays to poultry; Wednesdays to vegetable gardening; Thursdays, livestock and dairy; Fridays, flowers and home grounds; Saturday, miscellaneous.

Brief Summary of Years Extension Work

Household Accounts, Child Guidance, and Home Grounds Improvement projects, started in the Spring, have all been completed in this county. Clothing and Home Nursing classes will end this month.

Six hundred women have been enrolled in these projects during the year. Anyone interested in signing up for fall classes is requested to notify Mrs. McIntire, Home Demonstration Agent.

H. D. A. Attends M. S. C. Conference

Mrs. Mary M. McIntire, Home Demonstration Agent, attended the annual Spring conference of State Specialists and Home Demonstration Agents held July 17 and 18 at the Massachusetts State College, Amherst.

Agents representing eleven counties were present at the conference where plans for the coming year were discussed.

Miss Ruth McIntire, State Recreation Specialist, will meet with two community groups in the fall. These are the topics she will discuss: (1) Home and Family Recreation. (2) Community Recreation. (3) Reading (selection of books). (4) Hobbies.

Establishing Choice Perennials In The Garden

Perhaps you have been desirous of owning some of the newer and choicer varieties of perennials for your garden and have thought that you could not afford to purchase the plants or perhaps what is more apt to be the case you would rather have the thrill of growing your own plants. If that situation exists you can procure practically any perennial that you wish by planting the seeds now. There is much in favor of planting perennial seeds now. The plants will be large enough to conveniently transplant next fall into their permanent location and you have them in after annuals and other plants have gotten well established and started so that you will not have to compete with seedlings of other plants. Select sheltered, protected location where the seeds can germinate without being exposed to undue mechanical injury such as dogs, children, etc., and plant the seeds as you would the seeds of annuals. When they are showing their second leaves they can then be transplanted to a nursery row where they will grow for the balance of the summer. Choose a rich soil for this purpose. I think you will have no trouble in establishing and growing successfully such perennials as lupine, larkspur, poppies, columbine, primroses, and many of the other unusual plants.

A. M. Davis

Guide To Low-Cost Balanced Diet

Milk
for children—1 qt. daily
for adults—1 pt. daily
Vegetables
Potatoes—1 or 2 daily
Green or raw—1 serving daily
Others—1 serving daily
Fruit (Fresh, canned, or dried)
1 or more servings daily
Tomato, Orange, Grapefruit, or
Raw Cabbage—1 serving daily
Meat (lean), Fish, Cheese
1 serving daily
Dried Peas or Beans
1 or 2 servings weekly.
Eggs
for children—5 to 7 weekly may be used partly in place of fish or meat substitutes.
for adults—2 to 3 weekly.
Whole Grain Bread or Breakfast Cereal
2 or more servings daily
Fats
2 to 2½ tablespoons daily.
Sugar or Molasses
2 to 3 tablespoons daily. This includes that used in cooking.
Water
for children—4 to 5 glasses daily
for adults—6 to 8 glasses daily
May E. Foley,

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 16

HATHORNE, MASS., JULY, 1935

NO. 7

Tarbox Gardens

One of the most attractive flower growing establishments operated by graduates and students in floriculture of this School is that conducted by Ernest Tarbox, Jr., an undergraduate, at 15 Hayden Road, Cliftondale. It consists of a greenhouse 14x28 feet, built in December, 1933, and gardens equivalent in area to several house lots. The house was built by Student Tarbox with the help of a carpenter, pipe-fitter, and brick-layer. It is of standard sashbar construction with 16x24 inch glass and sidewalls of storm sash. The headhouse has a shingled roof, and glass walls that make it very light.

The gardens are highly attractive with their intervening lawns hung with sturdy oaks and maples and edged with shrub and rose borders. A towering cliff and steep woodland hillside furnish both a unique background and lodging for native shrubs and alpine. A trail is being laid out and pockets contrived to receive the many choice plants to follow. Garden seats, conveniently placed, offer visitors a resting place while their orders are being filled, and entice them to tarry to enjoy the tastefully bordered lily pool and beds of perennials close at hand.

In May, 1934, Student Tarbox got his first real experience in waiting on customers and designing baskets and window boxes. With the house full of salable stock, he canvassed the community for the purpose of letting folks know that Tarbox Gardens was in existence, and inviting them to give him a call. Business came, and with it daily varied inquiries and a number of real life situations that were brand new to the young proprietor. He seemed to meet each new situation sensibly, drawing upon the fund of information he had derived from the School, and from previous gardening experiences, and counseling freely with his parents and project instructor.

The second spring found young Tarbox better prepared to fill orders. Go-getter that he is, he distributed 150 cards announcing Easter plants, and for Memorial Day he placed three hundred and fifty striking fliers in as many homes, with most grati-

(Continued on page 2, col. 3)

Communal Gardens

Something unique in the experience of this School was a visit paid it by the Haverhill Community Garden group on July 12.



A view of the Pow Wow River in Amesbury

Communal farming (similar in part to that of Russia) with salaried workers under the ERA planting the crops, is for the first time being undertaken in Haverhill. The salaried crop growers will have no share in the produce which is to be distributed among citizens on the Welfare.

It was with the intent to inspect the School farm that this group paid its visit here.

High Cost of Honey

Beekeepers and scientists have made many estimates as to how far bees fly in making a pound of honey, but until now no one has determined how many miles by truck and automobile the modern beekeeper must travel in doing his part in producing and marketing a pound of it.

In a survey by the United States Department of Agriculture and the University of California, it was found that 225 California beekeepers whose honey crop in 1933 amounted to 6,130,181 pounds, travelled 1,493,628 miles.

The extent to which automobiles are used varies with the type of apiculture. In Oregon and Intermountain States, where hives are not often moved from place to place during the honey flow, about ten percent of the cost of a pound of honey is in transportation, whereas in the migratory apiaries in California, transportation accounts for from 20 to 25 percent of the cost.

Who Said Bugs?

If diseases are not troubling your crops the bugs are, and as long as plants grow, there will be some kind of a worm or borer to help devour them.

Flea Beetles will continue to feed on potatoes, tomatoes, turnips, egg plants and radishes. When you dust or spray your tomatoes and potatoes for blight, add arsenate of lead at the rate of one teaspoonful per gallon of water or in dry form at the rate of one teaspoonful per pound of Bordeaux dust.

Mexican bean beetles are thick on the second planting of beans and can be controlled by the use of

Cop-o-tex, Kol-Rotomone, or magnesium arsenate. Magnesium arsenate is used at the rate of five and one-half teaspoons per gallon of water or in dry form at the rate of one pound magnesium arsenate per five pounds hydrated lime.

Cabbage worm or looper is controlled by one teaspoonful of lead arsenate per gallon of water. Remove outer leaves before cooking.

Striped cucumber beetle may be controlled by dusting or spraying as for Mexican bean beetles.

The common squash bug is trapped under small boards placed near squash plants.

Potato beetles are controlled by adding a teaspoonful of lead arsenate to the bordeaux which you use for blight.

The tomato horn worm is controlled on tomato plants just as potato beetles are.

For your convenience there is a bulletin No. 116 printed by the Massachusetts State College Extension Department, entitled "Control Calendar for Vegetable Pests" which may be had for the asking.

C. M. Stearns

Topsfield Fair
August 30 through
September 2

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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SUBSCRIPTION 25c PER YEAR

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Calendar

July 29 through 31. Summer Conference of Teachers and Directors of Vocational Education in Massachusetts, at Norfolk County Agricultural School, Walpole.

August 30 through September 2. Topsfield Fair.

September 3. Opening of agricultural and homemaking departments of this School for new students.

Food Situation 1935

While it is too early to estimate definitely the outcome of many of the crops, an interpretation of information available at the beginning of June indicates that the total supply of the major foods to be produced in 1935 is likely to be approximately the same as in 1934. Although the output in 1934 was 9 percent below that of 1933 and 20 percent below the average for the five years 1929-33, the reduction in exports which has taken place in recent years will permit a consumption in 1935 equal to average and a normal carry-over at the end of the season.

Alumni Notes

Alvin Courant, of Lowell, a former student of this School, is selling insurance.

Viola Messer, class of 1929, is spending the summer in California. Miss Messer has been reapointed to the department of related sciences at the Worcester Trade School for Girls where she will resume her duties in September.

Malcolm Spaulding, class of 1930, of Newburyport, and Lewis Williams, a former student, of Haverhill, are both enlisted in the coast guard service.

Every Soil Is Fertile But Not For All Plants

Every soil is fertile. But not for all plants. Ordinarily when a soil is called "fertile" or "unfertile", reference is to crop plants—when as a matter of fact every soil is fertile to some plant. It may be corn, grass or strawberries. Or again the plant may be cactus, jack pine, or bulrushes.

All land is not fertile, however, for all land does not have soil. Before soil can be formed rocks must be broken down by weathering. The weathered rock is made into soil by living organisms. Each soil has its own characteristics produced by the action of microorganisms. Soils and plants develop together—each influencing the other.

There are thousands of soils, each with its own characteristics developed with and by the native plants. In general, it may be said that each plant attempts to make soil from the weathered rock fertile for itself. Thus each soil is naturally most fertile for those plants most nearly like the plants with which it developed.

There are two ways—fundamental to all agriculture—to have a soil fertile for the crop which it is to produce. Man can change a soil so that it will grow some particular plant. Or he can choose plants adapted to the soil as it already exists. Those who favor the latter—and newer—method, say it will save much labor that might be wasted upon the former.

New Bulletins

There is a revised edition of "Food Preservation Recipes", a leaflet issued by the extension service of the Massachusetts State College at Amherst. The leaflet is available free of charge.

A complete discussion of "the queen of hay crops" is contained in Leaflet No. 9, "Alfalfa in Massachusetts," which is also issued by the State College and may be had for the asking.

Milk Control

About 4500 persons have been licensed by the State Milk Control Board to sell milk in Massachusetts, 2000 of them doing such a relatively small business that they are not required to pay license fees to the Board. All of them, however, come in touch with the Board and all that did not have a bookkeeping system to control their business before the new milk law went into effect have since adopted a form of simple bookkeeping assisted by the Control Board. Many of them had no records of any kind until reports were called for by the State Board. To begin with the Board supplied them with blanks on which to keep daily records, but now they are supplying themselves with ledgers for daily entries of purchases and sales. In addition to this they have modernized their business to the extent that even the smallest dealers are using bank checks in making payments.

Collections by the Milk Board for licenses and assessments in May and June reached their peak, as 4881 checks representing those two types of payments were received and only one of those checks had to be returned for lack of funds, and that was made good within ten days. Earlier in the year, before the industry was so well organized throughout the state, the Board would receive several bad checks every month from a much smaller number of dealers.

TARBOX GARDENS

(Continued from page 1)

fying results. Oversold on some items, Ernest contacted producers of the needed plants and received valuable firsthand lessons in buying at wholesale. Figuring costs, pricing his products and purchases, preparing estimates, and offering suggestions all contributed experiences of incalculable value to the moving spirit of Tarbox Gardens.

A rehabilitated beach wagon, carrying the firm's name and address, constitutes at once a delivery unit and advertising medium. And, along with the activities incident to developing a flower and nursery business, Ernest has a contract to care for quite sizable home grounds on a nearby street.

Ernest proposes to carry on a combined flower growing and nursery business together with a landscape planting and maintenance service. He will return to School in October for his fourth and final year, and will major in ornamental horticulture.

It is only fair to record in closing that the parents of this enterprising young man are in sympathetic accord with his efforts to establish himself in his chosen field, and to them must go a proportionate share of the credit for his progress.

H. Linwood White

Shall Chix and Pullets Be Ranged or Confined?

D. C. Kennard and V. D. Chamberlin have published a very interesting report in the Bimonthly Bulletin of the Ohio Agricultural Experiment Station under the title "Shall the Chicks and Growing Pullets be Ranged or Confined?" The following material is quoted from that report:

"Contaminated soil has been held responsible for many of the ills of chicks, growing pullets, and layers. If this were true, the obvious solution would seem to be either to raise the chicks and pullets each year on fresh, uncontaminated ranges or to confine them indoors or to wire sun porches. Consequently, many poultry raisers have made great efforts to provide fresh, clean range; whereas others have endeavored to accomplish the same object at considerable expense by growing their pullets in confinement. Are these efforts and this expense justified?

"Each year the poultry raiser faces the proverbial range problem. Fortunate are those who operate on a two or three year range rotation so that a fresh range awaits the new crop of pullets each year. For many this is impractical; hence, they are obliged to take their chances with the last year's range or a questionable range which has been run over by mature birds or otherwise exposed to their infections. To avoid the liabilities of a contaminated range, many resort to raising the chicks and growing the pullets in confinement. How do pullets raised on contaminated range, fresh range, and in confinement compare during the growing period and as layers? This Station has been testing different methods of managing growing pullets during the past five years in an endeavor to secure information bearing on these questions.

"The points emphasized by the data as a whole are: First, that according to these tests, it would seem to be extremely hazardous to brood chicks and grow pullets in confinement or in batteries if they are to be exposed later to disease or parasite contamination or similar infections from other sources. Second, that if chicks or pullets are to be exposed to contaminated soil or premises, the exposure should be as soon as possible after they are two weeks of age, so as to give them the opportunity to acquire resistance to the infections at an early age; or, to put it differently, if chicks are brooded and the pullets are grown in confinement, they should be carefully guarded against the hazards of contaminated soil and the like by continued confinement or be transferred to a range known to be free of disease contamination. Third, that range paralysis persisted much the same irrespective of the different managements tested. In fact, there

Fly Menace

The fly problem is one which gives all progressive dairymen serious concern. Flies in dairy barns are menaces for two reasons: First, they annoy the cattle; second, they contaminate dairy products. Unfortunately, conditions about a dairy not only attract flies but also favor their breeding.

The seriousness of this problem can be considerably lessened by eliminating the breeding places. This can be done in either of two ways: by dumping manure in a spreader and scattering it at least every three days or by storing the manure in a special pit constructed of cement and enclosed in a tight series of screens. Flies which chance to enter can be caught in a conical trap.

Supplementary control can best be accomplished with the use of pyrethrum sprays and sticky fly bands hung from ceilings.

The milk room should be well screened and flies which do enter by way of the door should be trapped on fly paper.

J. F. Gallant.

Fresh Eggs Guaranteed

The recently enacted "Fresh Egg" law with which poultrymen should be acquainted, goes into effect on September 20.

A copy of the law in leaflet form is obtainable through the State Department of Agriculture, hence storekeepers and others who sell eggs should have no reason to violate the provisions of the law. Directly after September 20 the Department will inspect eggs sold in stores, with the hope of rectifying unlawful practices which have been known to exist in the state.

Penalties for selling eggs in violation of the provisions of the law are punishable by a fine of \$25 for the first offense and not than \$100 for subsequent offences.

was a slightly higher percentage of paralysis among the layers raised on fresh range and in confinement than those on contaminated soil.

"These four years' results and experiences under varying conditions have demonstrated that the behavior and performance of pullet layers are definitely influenced by their management as chicks and growing pullets. However, management in itself had its limitations and all the managements tested failed to prevent or control some of the most serious causes of mortality, such as paralysis and the cholera-like diseases. For their prevention and control, we believe that special breeding, selection, feeding, and management for the development of birds resistant or immune to such complications offer the best promise for the final solution of the problem."

Alfalfa Expensive But Valuable Crop

Alfalfa is an expensive crop to get started, but it is worth more than it costs if the seedling "takes." Therefore, a farmer should be sure to take every step correctly in seeding. This is the contention of county agricultural agents and crop experts.

Alfalfa requires rather large amounts of potash, in addition to the super-phosphate, and this should be applied each year. Even though alfalfa is a legume and therefore is capable of taking nitrogen from the air and fixing it in the soil, a light application of nitrogen fertilizer at seeding time will help the seedling to become established and will keep the plants growing vigorously until they are able to "manufacture" their own nitrogen.

Many farmers follow the practice of mixing grass with their alfalfa seed. If the alfalfa grows, its value as hay is not reduced greatly by the presence of the grass, and if for any reason the alfalfa fails to "catch," the grass will occupy the land and produce a hay crop.

Milk Yield or Number of Cows?

For years dairymen have been taught through schools, colleges, institutes and meetings, by county agents, extension specialists, newspapers and magazines, that milk yield per cow was the big factor to keep in mind. "Increase the milk yield per cow" has been their motto.

Cornell bulletin number 562, entitled "Economic Studies of Dairy Farming" shows that variations in the number of cows kept per man employed were nearly twice as important as the annual production per cow in determining the amount of milk produced per man.

Size of herd was quite important. The group containing an average of eight cows produced an average of 32 pounds or 16 quarts daily. The annual feed cost was \$175 per cow; labor (248 hours) cost \$106 per cow, a total cost of \$281. The net return over feed and labor per herd was \$859.

The following figures indicate that production is more important in return per cow, but, size of herd is more important in net return to the operator (man).

Size of Herd	\$	16	29
Feed Cost	\$175	\$138	\$131
Labor Hours	248	206	145
Labor Cost	\$106	\$ 80	\$ 54
Return per Cow over			
Feed and Labor	\$113	\$ 95	\$ 95
Return per Herd over			
Feed and Labor	\$859	\$1521	\$2439
F. C. Smith,			
County Agent			

Outdoor Meals In Hot Weather

When the kitchen is too hot to cook dinner, and the family complains of the food, a wise homemaker will serve her meals out of doors. Some of the food may be prepared at home, but probably the part that will be enjoyed most will be the food cooked over an open fire.

Suggestions on cooking out of doors are contained in a leaflet prepared by two specialists of the Massachusetts State College. Miss May Foley, nutrition specialist, and Miss Ruth McIntire, recreation specialist, combined their knowledge of food preparation and camp craft to prepare a leaflet "Outdoor Cookery" which has just been issued by the extension service of the college.

The leaflet suggests several different types of cooking fires which are satisfactory for different purposes. The Hunters' and Trappers' fire, for example, is good for frying, while a backlog fire may be more satisfactory for roasting. An "inner lay" is a pit oven for cooking an entire meal. Each of these types of fires is described and illustrated in the leaflet.

To simplify the problem of what foods to take on a picnic, a number of menus are suggested, with recipes for making a number of the dishes which are included. Planked fish is one delicacy highly recommended for an outdoor meal. (It is necessary of course to start by catching the fish). An appetizing food combination is "Kabobs" made by roasting alternate chunks of steak, apple, onion, and suet on a stick, over the open fire.

These are only a few of the foods suggested for outdoor meals in the leaflet. "Outdoor Cookery" is available free of charge at the Mailing Room, Massachusetts State College, Amherst, Mass.

Crab Grass

A heavy infestation of crab grass in the lawns is becoming evident this month. It is a pernicious weed, deceiving in its light green color, for it tends to give the lawn a successful air. Later, however, wiry branches develop with spreading seed pods (hence the name "crabgrass").

The weed will root where any of its joints touch the ground. In that way it spreads quickly and kills desirable types of grass.

Eradication
Plant food applied to the infested area to encourage the growth of this weed will allow it to be cut low with a lawn mower.

On areas used for lawn tennis and croquet courts, a bowling green or garden path, hand weeding is recommended.

From the standpoint of general eradication, mowing the lawn and raking the clippings is suggested. The

TOPSFIELD FAIR
August 30 through September 2

Home Demonstration Agent

Mrs. Mary M. McIntire, Home Demonstration Agent, writes from summer school at Fitchburg of a new angel cake which should be tried in the extension workers' foods classes next fall.

On Friday, August 16, Mrs. McIntire will broadcast on the Farm and Home hour over WBZ (at approximately 12:45) on the subject "School Clothes."

While at Farm and Home week at the Massachusetts State College Mrs. McIntire acquired interesting ideas for fall projects in Extension work.

Women who are interested in projects supervised by Arnold B. Davis, extension horticulturist, and Miss Ruth McIntire, recreation specialist of the state extension department, are asked to notify Mrs. Mary M. McIntire, Home Demonstration Agent at this School, in Hathorne.

September Blooms

Unless you are interested in producing seeds from Delphiniums there is nothing to be gained by letting your plants go to seed when they are through blooming. As soon as the plants are through blooming the old flower spikes should be cut back, the ground around the plants cultivated, a small amount of fertilizer added to the soil, and the whole plant sprayed with Bordeaux mixture. If this practice is followed it is safe to say that you will have a second crop of flowers some time along in September with no injury to the plants.

A. M. Davis

Garden Advice

What happens when you water your lawn and flower garden religiously for twenty minutes every evening? You cover everything with a light sprinkle of water. The water never sinks more than two inches into the soil, leaving the feeder roots at the surface of the ground. In hot weather most of the water is evaporated before the plants use any of it.

What method should you employ in watering the garden and lawn? Turn on the hose and leave it in one spot for half an hour or longer. Then move it to another location for the same period. It may take a week to do your entire garden but—if 'twere done 'twere well it were done rightly.

clippings, of course, must be removed. Systematic and thorough weeding and clipping of this grass now will help considerably in preventing its becoming a major pest later in the season.

Balanced Ration

The question "What is a balanced ration?" is one that has caused no end of discussion in recent years. It is a question not difficult to answer, nor it is a matter as technical as people have come to believe it to be.

"A balanced ration is an abundance of a variety of clean, wholesome food, which is not too much changed in the cooking, but is carefully prepared, attractively served and eaten in the midst of peace and contentment."

By adding a small amount of protective foods, so-called, such as milk, vegetables and fruit, the above ration may be made complete to fill the needs of individuals. Whoever will consume the protective foods to the extent of one-third of his menu, to the amount of perhaps 1000 calories a day, and then will eat anything else he may wish, provided of course, that it is clean and wholesome, will be adequately nourished.

"A balanced ration is vitally important, but not at all hard to attain if one will pay a little attention to the protective foods and let nature and instinct take care of the rest.

Condensed from "Food Facts."

Berry Bulletins

With the advent of the berry season, two publications issued by the Massachusetts State College are proving highly popular with Massachusetts homemakers. One is a new circular on ways of using blueberries. It was prepared by Miss May E. Foley, nutrition specialist, and it includes recipes for making puddings, cakes, pies, muffins, and beverages. Some of the recipes have been contributed by homemakers.

The other publication has been distributed by the college for several years, but its popularity has not waned. It is Leaflet No. 142, Food Preservation Recipes. This publication prepared by Professors W. W. Chenoweth and W. R. Cole, of the department of horticultural manufactures, gives directions for canning fruits and berries, vegetables and meats, and tells how to make jams, jellies, and preserves of all kinds. The recipes are all "kitchen tested" many times over, and are presented in a concise, easily understood manner.

Both of the publications are available free of charge at the Extension Service, Massachusetts State College, Amherst, Massachusetts.

Pansy Seeds

If you would have pansies superior in your next summer's garden, either for your own pleasure, or for sales purposes, it will be well to order now the better grade of seed, and plant it the first of August.

ESSEX FARMER AND HOME MAKER

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Future Farmers In Action

"Future Farmers in Action" is the title of a book written by Arthur Kendall Getman, Agricultural Specialist of the New York State Department of Education, and dedicated to the Future Farmers of America. This organization of young men engaged in farming needs no introduction in the West and South, but in New England little is heard of its activities.

There is a chapter of the Future Farmers of America at this School with a membership of 172, all students of the school. This chapter, organized in March, 1931, has accomplished much in four years. At Essex all extra-curricular activities of the school are managed by students under the supervision of instructor advisers. The athletic and social programs as well as all other school activities are managed by the student organization.

Not only do the members discuss school problems but they have extended their activities to the management of a roadside stand, a gas station, and a sales booth at the Essex County Fair held at Topsfield, Massachusetts each year. The roadside market on the Newburyport Turnpike in Danvers and the gasoline pumps located on the School grounds are the main sources of revenue. These chapter enterprises returned a net profit of several hundred dollars last year and sales indicate a similar return for 1935.

During a period of five and one-half months \$122.00 was realized by the sale of ice cream, sandwiches, and milk to chapter members.

The money earned from these activities is used to send members to judging and public speaking contests, for school contest prizes, and to defray any other chapter expenses.

But the Essex Chapter of Future Farmers has other aims. Its major object is to make better farmers through worthwhile activities. At least one half of the membership is grouped into committees whose duties are to devise ways and means for the advancement of the individual as the future farmers of the country are being moulded.

(Continued on page 4, col. 3)

Topsfield Fair

From ten in the morning until ten at night the Essex Agricultural Society shall have its doors open at the Topsfield Fair grounds on August 30, 31, September 1 and 2.

The 114th annual fair, based on the



A Topsfield Fair Exhibit

traditions of the society with livestock parades, judging, exhibits of fruits, vegetables and flowers, and steeple chase on the race track, will have a modern setting. Airplane maneuvers, a marathon race, drum corps competitions, motor cycle races, and a concert by Aleppo Temple Shrine Band of Boston with Walter Smith conducting, are some of the features of this year's fair.

The School exhibit this year is to be a unique demonstration of the work carried out in the homemaking department. Come and see it.

Improved varieties of fruit from the School orchard and fruit nursery will have their places in the fruit building.

And we predict fair Fair weather!

Inflated Blueberries

Cultivated blueberries, eighteen of which cover a foot rule, are growing in the School fruit nursery. Of the several varieties experimented with, Katherine is the largest this year.

If these figures are lacking in significance, compare them with the thirty-six wild blueberries it would take to cover a similar foot rule. What is more significant, their quality equals their size.

Gladiolus

The season for gladiolus to begin their prolific display of colour is now at hand. One of the joys of growing the gladiolus as a garden flower is to have the desired amount of spikes produced so that quantities of flowers can be cut for use indoors. In using the gladiolus as a cut flower, it is well to remember that in arranging flowers there is no foliage which goes as well with any flower as the foliage of the plant on which the flower was borne. And so for that reason I would suggest that in cutting this flower you always cut one or two leaves of the gladiolus plant to go with it to complete the effect of the bouquet.

While it is important to cut one or two leaves for effectiveness, it is more important to leave two or three leaves to each bulb so that there will be plenty of leaf area to develop food which will be used to produce bulbs for next season's blooming.

It might be interesting to point out here that gladiolus is one of the few flowers which, if cut at the time when the flower buds are beginning to show color, will open as full and completely as if every bud on the stalk was allowed to partially open in the field. For that reason when cutting gladiolus to sell or to give away, it is well to cut them when they are first beginning to show color and not wait until the spike is partially through blooming.

There is one other cultural note of importance. Many times you find gladiolus producing curved flower spikes. This is attributed among growers to the fact that there is insufficient water at the time the spike is formed so that during the day it wilts over and at night cold dew being on the plant and moisture in the air, it tends to assume an upright habit which will give you a definite crook in the stalk. This condition can be eliminated by being sure that plants have plenty of water from the time they start to bloom.

A. M. Davis

TOPSFIELD TOPS
THEM ALL

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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SUBSCRIPTION 25c PER YEAR

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Essex County Milk Goat Breeders' Association
President, Ralph W. Burnham Ipswich
Secretary, R. H. Campbell Topsfield
Treasurer, Mrs. Charles Thomas Essex

Calendar

August 30-31, September 1-2—Topsfield Fair.

September 3—Opening of agricultural and homemaking departments of this School for new students.

September 4—Opening of homemaking department for old students.

September 30—Opening of agricultural department for old students now out on project.

Suggestions For Poultrymen

Burn or bury dead birds. Burning is the preferred method of disposal. Never leave them in the pens as a source of protein for other birds.

A mixture of crankcase oil and kerosene distributed thoroughly into cracks and breeding places of lice and red mites will control and eliminate these poultry pests. The roosts should be well cleaned even though it requires removing unnecessary boards. The use of Black Leaf 40 on the roosts a little before the birds go to roost has simplified the problem of louse control. The fumes arising from the preparation during the night kill the lice on the birds.

Alumni Notes

Announcement has been made of the marriage of Miss Muriel Johnson, class of 1934, to John Mulcahy, on April 18. Mr. and Mrs. Mulcahy are living temporarily in Andover.

Fruit Tree In a Lawn

Thrifty peach tree growing without cultivation is of uncommon occurrence except where the grass is clipped regularly and left to lie around the tree. In fact, vigorous fruit trees in lawns are the rule rather than the exception. Nitrogen in young grass seems to be in a rather readily available form and capable of being washed back into the soil.

A regularly clipped lawn therefore returns to the soil much of the nitrogen taken up by the grass. The layer of grass also adds a small amount of mulching material, thus aiding in the conservation of moisture. And so the fruit tree in a lawn fares much the same as the tree in cultivation. Whether or not the orchard sod should be mowed every Saturday is a debatable question. The cost would probably exceed the returns.

Agricultural Adjustment Needs Changes

Professor L. G. Albaugh of Iowa State College, a guest speaker at the Massachusetts State College Farm and Home Week, brought a message which bears consideration. It is his opinion that the future of the agricultural adjustment program for the United States will depend on many factors of a national policy. Among the things to be decided are whether the United States is to produce for home markets alone or for world markets; whether we will be willing to occupy the position of a creditor nation, which will mean accepting greater imports; whether city people will be willing to share higher standards of living with rural folk.

One of the strong features of the agricultural adjustment program as administered during the last three years, according to Professor Albaugh, has been the speed with which corrective measures were put into operation. However, the AAA program did not consider differences in farms, and was administered largely from centralized offices, instead of locally.

An agricultural adjustment program of the future, it is predicted, must be more flexible in its regulations and should cover the farm as a business unit, instead of dealing with single crops of commodities; more compensation should be given for good farm practices; local committees should have more control of the program; consumers should be represented to prevent unfair prices.

Microscopic Hosts In the Soil

Life teems in the soil with inconceivable numbers and activity. Dr. Charles Thom of the United States Department of Agriculture, in a recent talk to world soil scientists at Oxford, England, said counts of soil bacteria have shown as many as 46 billions of active organisms in a gram of decomposing plant material. There are 28 grams in an ounce, 16 ounces in a pound. A gardener picks up a double handful of mellow compost and there may sift through his fingers, among other things, a living microscopic host represented by a figure that reaches half way across the usual newspaper column—21,000,000,000,000.

F. F. A. Project Tour

The annual project tour and outing of the Essex Chapter of Future Farmers of America on August 15 was attended by about 70 students and instructors.

The first stop was at the three-quarter-acre vegetable garden of Warren Towne, '37, on Dodge Street, Beverly. A few rods beyond on the same street was the vegetable garden and 250 chick and 90 turkey poultry project of Gilbert Freeman, '37. After a short visit at the 200 baby chick farm of Towne on Raymond Avenue the combination vegetable, fruit and poultry project of Lawrence Shanks, '36, on a newly acquired farm of 12 acres in Essex was inspected.

A quarter of a mile further on was the quarter-acre vegetable garden of David Elwell, '37, on his home farm. The pullets from his 150 baby chicks being on range at another farm owned by his father, we visited them at the north end of Essex.

Just over the Ipswich line we next came to the market garden farm of Maynard Tucker, E. C. A. S. '20, with whom Sargent Griffin has an employed project. Early potato harvest was just starting there. Mr. Tucker has already sold some 200 barrels from his other farm in Gloucester.

Directly across the road we next visited the two half-acre vegetable gardens of Charles and Norman Chambers '38. Like Elwell these boys help their father in the work of good sized farms carrying nine to eleven milking cows.

A straight run brought the tourists to Stage Fort Park in Gloucester at 12.15 P. M. The afternoon program included a clam bake and corn roast on the beach, a ball game, swimming, and a visit by about half of the group to the extensive, well-kept nursery plantings of Corliss Brothers in West Gloucester where Hollis Lufkin, '35, is employed.

I believe that all who made the trip felt that the day had been a pleasant and profitable experience.

A. L. Dacy

Massachusetts Cows Practically TB-Free

Massachusetts is rapidly nearing the time when it will be practically free from tuberculosis in cattle, according to the latest reports from Director Charles F. Riordan of the Division of Livestock Disease Control, State Department of Agriculture. Reports of tests made in May on cattle in the state show that less than one half of one per cent reacted. This is a very satisfactory showing in the opinion of Commissioner of Agriculture Edgar L. Gillett. It indicates that by the end of this year the state can be declared an area freed from bovine tuberculosis.

The May record shows a substantial improvement over April, when 37,523 cattle were tested with 337 reactors. This is a little less than one per cent.

The most striking proof of the progress which is being made through this campaign to free Massachusetts of tuberculosis in cattle, is in the comparison of latest records of testing with May of last year and the year before. In May in each of the three years about 26,500 cattle were tested. In May 1933 there were 1919 reactors, about 7 per cent. In May 1934 there were 1240 reactors or about 4 per cent. In May 1935 there were 121 reactors or less than one half of one per cent.

Nectar For the Bees

Trees which especially attract bees are willows, maples, locusts, basswood and sumac. Shrubs included in the favorite haunts of bees are hawthorne, huckleberry, privet, viburnums, false indigo, inkberry and clethra.

A hive of bees on your property does much for your orchards and gardens. Remember, then, when planting shrubs or trees, that the ones listed above are favorites with the bees.

Infested "Drops"

The season of maggot infested "drops" is here. A single worthless apple on the ground in August may be responsible for half a dozen maggot flies in the tree next July. Drop apples from the trees of summer and fall varieties are much more dangerous from the standpoint of breeding maggot flies than are the drops from winter varieties. Eighty per cent of the maggots in Wealthy drops may mature into flies, while only 10% of the maggots are likely to mature in Baldwins.

Moral — Pick up and destroy promptly all those infested drops which often up readily if you would simplify the task of controlling maggot in 1936.

Annual Bearing Apple Trees

If it were possible to thin blossoms economically there would be little question about annual crops of apples even on biennial bearing varieties. But thinning of blossoms is not feasible commercially. Early thinning of fruits, however, may be worth the cost even though rather expensive. There is evidence to show that thinning within two or three weeks of petal fall will help to overcome the biennial tendency.

Wild Carrot

For those of you who are bothered with a heavy growth of wild carrot (Queen Anne's lace) on your property, there is only one sure way of eliminating it. That is by plowing it under.

Chemicals which kill this plant kill everything else too so that is out of the question.

FAIRS' DATES

TOPSFIELD
Aug. 30-31, Sept. 1-2

BROCKTON
Sept. 9-14

EASTERN STATES
Sept. 15-21

Boston Regional Produce Market

The new Regional Market has been in operation three weeks. In that time, the number of buyers has exceeded the number of farmers using the market. Buyers are paying good prices and are able to buy citrus fruits from the wholesalers located on the platform. Buyers, wholesalers, and farmers who have taken advantage of the market are very well pleased. Each night, farmers have found that they can drive into the market at six in the evening and sell out in one, two, and three hours, returning home early with greater profits than they have ever realized.

The people of Massachusetts are watching this new market and are interested to see what the farmers of the state are going to do with the greatest opportunity they ever had to put their business on a sound basis.

The farmers have done well in building this Market. Buying stock and using the Market are two ways in which farmers may promote their own industry.

The management of the Regional Market expects to establish an outlet for those farmers who do not care to sell their own produce. It will then be possible for a farmer to turn his produce over to the Regional Market Commission House, which will sell and return to the farmer the full price, less a small commission.

Reducing Feed Costs of Herds

The dairyman who wants to cut down on his feed bill can do it in several different ways. Perhaps the most important way of reducing feed costs is to feed a cow according to her milk production, the butterfat test of her milk, and her ability to consume roughage. Most dairymen take milk production into consideration, but Professor J. G. Archibald of the Massachusetts State College suggests that the butterfat test and ability to utilize hay and silage should have some influence on the amount of grain given a cow.

Too often a dairyman is influenced to buy a feed because of its low price per ton, when another feed mixture at a higher price per ton would be a better buy because it contains more protein and more total digestible nutrients. The only safe way to calculate the comparative values of two or more rations is to figure the cost for each unit of protein and each unit of total digestible nutrients.

When the cows are on pasture it is possible to cut down the amount of grain without materially reducing milk production or causing the cows to lose weight. In the college herd the grain ration has been cut to less than half while the cows were on good pasture, with satisfactory results. The same method was practiced at this School in April, May and June when the cows were on fertilized pastures, also with satisfactory results.

Separate Growing Range For Cockerels

Cockerels saved for breeding should be removed from the pullets early and placed on a range apart from them. It is important that they should have comfortable housing, clean grass and shade. The same opportunity should be given them to grow sturdily as the pullets. Provide plenty of hoppers, scattered well apart.

Roosting poles placed on the range may give some of the males a place to fly upon and escape the driving from some of the more vigorous birds.

Fruit Meeting September 7

Fruit men of the State College are planning to meet at this School on Saturday, September 7. The County Agent, F. C. Smith and Instructor C. M. Wood will conduct a tour of the School orchards. W. E. Piper will talk briefly on the latest crop indication.

What Good Jelly Depends On

All fruits do not make equally good jelly, although there are ways of making jelly from almost any fruit. The secret of a jelly which sets successfully is the presence, in the right proportions, of at least three substances—pectin, acid, and sugar. The housewife supplies the sugar, and sometimes she adds extra acid in the form of lemon juice. Prepared pectin can be bought or made at home for fruits weak in pectin, but when Bureau of Home Economics experts discuss jelly making they mean jelly made from fruits which have sufficient pectin of their own.

Varieties of the same fruits differ in jelly-making power. The season, and where the fruits grow, influence acid and pectin content. A mixture of underripe and ripe fruit will make the best jelly. The former has more acid and pectin. The latter furnishes desirable flavor. Overripe fruit should not be used.

Tart quinces and apples such as Winesap, crabapples, cranberries, currants, wild grapes, gooseberries and plums of the Wild Goose type have sufficient acid. A tablespoon of strained lemon juice to each cup of blackberry, red and black raspberry, ripe Concord grape, plum, or quince juice not only helps jellifying but improves the flavor.

Experienced jelly makers often blend the juices of two fruits to give jellies a delicious flavor or attractive color, or to get the necessary acid and pectin. Some good combinations are currant, and raspberry, raspberry and gooseberry, apple and quince, grape and crabapple, cranberry and quince.

Lawn Clippings

All gardeners know that lawn clippings are probably most profitably left on the lawn area. There are, however, certain soils which have a tendency to dry out and certain plants which require a mulch. I refer now to tomato plants for an illustration. I think you will find that raking up lawn clippings, especially lawn clippings which are free from weed seeds, that is the coarse types of crab grass clippings, and using them to mulch your tomato plants and other plants which desire moisture, will have a very beneficial effect on the rate of growth of your plants. Decayed lawn clippings will also add humus material to your garden soil.

A. M. Davis

Chrysanthemums

If you are growing chrysanthemums in your garden be sure that they are not allowed to dry out. It will insure many and large flower buds for bloom later this fall if they are watered and fed now. Liquid manure is good food used once a week.

School Clothes

In her broadcast of August 16, Mrs. Mary M. McIntire, Home Demonstration Agent in Essex County, emphasized the importance of appropriateness in Johnny's and Mary's school clothing.

Of first importance is the weight of their clothing. Commonsense advises the practicality of light woollens for early fall, with cottons for the warmer days which New England weather never denies us even in September.

In choosing Mary's dresses, be sure that Mary has a share in the selection. It will please her to be allowed this privilege. Mothers may direct her desires.

If Mary is delicately built, select clothing with soft, feminine touches. Smocking added to a frock makes it less severe than plain tailoring for a child of this type.

If Mary is sturdy, dresses with pockets, straight or box-pleated skirts, and other accents of deft tailoring will become her.

Colors are important. In cold months, bright warm colors may be effectively worn in sweaters by both Mary and Johnny. In selecting an entire fall wardrobe for Mary, mothers should consider the convenience of a definite color scheme which will be carried out through the entire wardrobe. Based on the color of the coat a wardrobe is well chosen. Hats, shoes and gloves will match while contrasting colors in sweaters and dresses will add a fresh brightness.

Small pockets placed high on the waist, tight sleeves, shirrings at the yoke and hipline, and dresses buttoned all the way down the front are features which are pleasing young people this year. Jumper dresses with a change of blouses are practical and always attractive.

As to Johnny, his school clothes are as important as Mary's but not quite as difficult to select. Comfort and health are the requisites his clothing should provide. Johnny's suits should be easy-fitting. Suits that are too small are uncomfortable. Nor should they be baggy. Long shoulders, generous armholes and short sleeves are needed for free play of the arm muscles. Elbow sleeves are practical for all occasions and are adjusted easily to the strain of play. The neckline is also very important in the fit of a small boy's blouse. See that it is low enough so that there won't be any pull against his neck when he stoops over. His biggest job is stooping over you know.

John's trousers should not be too long. Short trousers permit complete freedom of his legs. He also needs plenty of freedom in the seat.

Ill-fitting and unattractive suits make the little boy shy and restless. Do buy or make Johnny a suit which fits well and is pleasing in color; one that expresses his individuality. Keep him smartly masculine.

Home Demonstration Radio Hour

The Home Demonstration Radio Hour presented on the first Wednesday of each month between 12.30 and 1.30 P. M. Eastern Standard Time, is sponsored by the United States Department of Agriculture in cooperation with the State Agricultural Colleges and the National Broadcasting Company.

The program scheduled for Wednesday, September 4 will include:

Concert, The Homesteaders' Orchestra.

"Farm Women Study Wise Buying," Mrs. Howard Kelley, Local Leader, Livingston County, Ill.

"What We Look For in Buying Home Furnishings," Miss Carrie C. Williams, Assistant State Leader, New York State College of Agriculture, Ithaca, N. Y.

"Increased Information for Consumers Now Available," Dr. Calvin B. Hoover, Consumers' Counsel, Agricultural Adjustment Administration, U. S. Department of Agriculture, Washington, D. C.

Fall Classes For Homemakers

Mrs. Mary M. McIntire, Home Demonstration Agent, announces that the following extension workers of the Massachusetts State College will be in the County to conduct fall classes:

Mrs. Ruth D. Morley, lecturing on Child Development.

Miss Grace B. Gerard, on Money Management.

Mr. A. M. Davis, Home Grounds Improvement.

Mrs. Mary E. Roundy, R. N., an instructor in this School, will also conduct classes in Home Nursing.

Anyone interested in joining these classes is requested to communicate with Mrs. McIntire.

Pruning Roses

The climbing roses which are now just finishing up their period of bloom can be safely pruned. All of the old flowers should be cut off and the new canes should be tied against a support so that they can be laid on the ground and protected this fall.

FUTURE FARMERS

(Continued from page 1, col. 1) well as for the improvement of the chapter.

The Essex Chapter promotes thrift, high scholarship, and good citizenship by recognizing outstanding members with a merit badge.

In order to advance to the higher grades, members are obliged to submit records of accomplishment. These records are approved or disapproved by fellow members.

It is through this organization that

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 16

HATHORNE, MASS., SEPTEMBER, 1935

NO. 9

Advantages of Keeping Goats At E. C. A. S.

K. W. Forman, Instructor in
Dairy Husbandry

1. We are able to teach milking to a larger number of students, more efficiently. Because goats are easier to milk than cows, the technique of milking may be taught with goats in a week's time, thereby simplifying the milking of cows at a later period.

2. Our animal husbandry and dairying students obtain excellent training in the sanitary methods of producing a high quality milk. This is particularly true in connection with goats' milk. In order to produce a good quality of goats' milk the bacteria count should not exceed 1000 bacteria to the cubic centimeter. The bacteria count of ordinary raw market milk averages about 150,000 to the cubic centimeter. The School goats are milked in a special milking room which is kept scrupulously clean. The milking is done in a manner much the same as that followed in certified dairies. From this knowledge one can readily see that the students are taught sanitary methods in the production of goats' milk which will always be helpful to them in dairying.

3. Milch goats are cared for and fed in practically the same manner as are dairy cattle. This gives our animal husbandry boys a chance to learn dairy practices previous to studying dairying.

4. Studying the advantages of goats' milk reveals, that it is more easily digested than cows' milk. The fat of milk is the most difficult part of it to be digested, and for this reason it is thought that goats' milk is more readily digested than cows' milk. The butter fat of goats' milk is white and does not rise in the form of cream as does cows' milk. In this respect it closely resembles the fat of human milk. Goats' milk contains sodium salts which are not present in cows' milk and since sodium chloride is a stimulant of ferment action, for this and the above reasons some physicians prefer goats' milk for infant and adult patients who need special diets.

5. Medical research may benefit by the School goats, when the value of goats' milk in the diet of tuberculous patients is tested in Essex County.

It may be of interest to add that goat-keeping has increased considerably in Essex County in the past five years. The U. S. Department of
(Continued on page 2, col. 1)

WEDNESDAY
OCTOBER 16
FRUIT AND VEGETABLE
SHOW
—
HORTICULTURAL HALL
BOSTON

New Commercial Varieties

Two new varieties which the School has been very active in disseminating this year, have been recognized in a commercial wholesale way on our large markets.

Red Gravenstein, which is a beautiful, solid-colored red sport of Gravenstein, has appeared this year in sufficient wholesale quantities to be well tested on our markets. The reports are most favorable. While its flesh is almost identical with the old form its color, solid flesh, and apparent good-keeping qualities have made it an outstanding variety. The prices received for this new type have been from twenty-five to fifty cents per bushel more than the old type. This, together with the fact that Gravenstein succeeds very well in Eastern Massachusetts soils, should make this type a money maker for our fruit farmers.

Milton apples have appeared in some quantity this year for the first time on our local markets. They have been very well tested on roadside stands. The variety was produced at the New York State Agricultural Experiment Station at Geneva, New York, by crossing McIntosh and Yellow Transparent. The resulting apple is midway in season, that is, it is best during the month of September. Its extreme beauty, size, and striking coloring would seem to make it a coming apple. The tree is almost identical in shape and foliage with McIntosh. It comes into bearing very early. Trees nine years old in the testing ground at the School have borne as high as six bushels per tree.

It is probable that the two above mentioned varieties will replace several of the varieties which formerly occupied the center of the stage, particularly Duchess and possibly Wealthy. The School is prepared to give information and help growers in obtaining these new kinds.

Stronger Fiber Boxes

Improvement in fiber-box construction is the aim of a forest products laboratory in a recently launched series of tests and experiments in making commercial fiber board. Next to the printing presses, the largest consumer of wood pulp in the United States is the fiber-container industry. A thorough understanding of the principles of fibre-box construction is essential both to production of more economical boxes and to the reduction of unnecessary loss and breakage in shipment.

The Forest Products Laboratory, maintained by the United States Forest Service in cooperation with the University of Wisconsin, recently added new machinery for making commercial fiber board. Standard and special controls on this equipment enable the operators to make runs with different types of paper and with variations in speed, steam pressure, gluing, and other conditions. The intent of the experiments is to develop principles of fiber-box construction is manufacture similar to those already developed for the construction of wooden boxes.

To accomplish this, special tests of the strength properties of container papers are first made, comparable to similar determinations with other materials. Next, the properties of built-up boards are examined.

Once these investigations are successfully made the fiber-box industry can produce a standardized line of containers with qualities predetermined for classified uses.

Fresh Food Facts

On September 20 the term "fresh egg" assumed a new significance in Massachusetts. On that date the new "Fresh Egg Bill" went into effect making it now illegal to sell, offer for sale, or advertise for sale as fresh eggs, strictly fresh eggs, nearly or new-laid eggs or under descriptive terms of similar import any eggs which do not measure up to a certain standard of quality. Briefly that standard is as follows: (1) clean, sound shell; (2) air cell not more than $\frac{1}{4}$ inch in depth; (3) firm, clear white; (4) yolk not plainly visible; (5) no visible germ development. All but (1) are factors determined by candling.

Identification of fresh eggs should help the consumer get what she pays for and not pay fresh egg prices for cooking eggs. The object is not to increase prices to the consumer but rather to help adjust prices according to quality.

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Secretary, R. H. Campbell Topsfield
Treasurer, Mrs. Charles Thomas Essex

Calendar

September 30—The Agricultural Department will resume classes with students returning from summer projects.

October 11—Joint assembly in Agricultural Hall. Speaker: Stanley Osborne, 12:45 P. M.

October 16—Fruit and vegetable contest at Horticultural Hall, Boston.

GOATS AT E. C. A. S.

(Continued from page 1)

Agriculture has many milk goat dairies scattered through the southern and southwestern states. Because of the inquiries which have bombarded Washington in regard to the nutritive value of goats' milk the Department of Agriculture has been conducting experiments for the past three years.

In Essex County there is a thriving Goat Breeders' Association which meets every month of the year. The secretary of this Association, Mr. Robert Campbell of Mills St., E. Boxford, will be glad to answer any inquiries addressed him.

New Students

One hundred and sixty-eight new students were enrolled in this School at the opening of the fall term.

Eighty-three of these were the following girls in the homemaking department:

Catherine Casey, Ruth Dixon, Alice Hoelrick, Geraldine Powers, Ruth Riley, Elvira Savinelli, Marion Thornton, Doris Tinsch, and Violet Vernile, of Lawrence; Helena Whelan, Ellen Pool, Marjorie Picardy, Barbara Metzger, Virginia Brostrom, Bertha Bowers and Phyllis Marks, of Lynn; Marcelle Berwick, Margaret Gallagher, Evelyn Howard, Ruth Hoyle, Madelyn Mathison, Rose Mills, Eleanor Sears, Eugenia Siddle, Methuen; Marjorie Brown, Jacquelyn Jackman, Ruth Peterson, Priscilla Preston, and Josephine White of Beverly; Mildred Day, Janet Gillis, Mary Minichiello, Olive Purdy, and Ellen Wills, Ipswich; Dorothy May Edmonds, Katherine McLaughlin, Gertrude Nyman, Margaret Spinney, and Betty Walsh of Saugus; Stasia Grabowski, Mildred Hennigar, Beatrice Loveys, Alice Morin, Lillian Hanson, Danvers; Abby Jane Ellis, Teresa Ellis, Ethel Lewis, Essex; Anna Burnett, Florence Chadder, Helen Hayden, Margaret Skinner, and Henrietta Stockley of Peabody; Pauline Buxton, Florence Caverly, Lilyan Dion, Kay Johnson, Hazel Mason, Blanche Roy, and Ethel Stasinopoulos, Salem; Ruth Cahill, Harriett Lufkin, Florence Smith of Gloucester; Florence Carty, Mary Lafond, and Williamena Smolak, North Andover; Helen Chase, Marjorie Kelliher, Elizabeth Poland, Newburyport; Laura Chase, Elizabeth Colby, Newbury; Emily Currier, Florence Downs, Salisbury; Eleanor Hoelzel, Alice Rubchinook, Middleton; Marion Hodgins, Sylvia Smith, Rockport; Ruth Odell, Pauline Welch, Marblehead; Athalie Adams, Rowley; Betty Ann Beal, Hamilton; Evelyn Gould, Boxford; Anne McFadden, Ipswich; and Beatrice Emerson, Haverhill.

Eighty-five of the new students are boys with the exception of two young ladies in the agricultural department.

These are: Charles Hoitt, Donald Kelley, Paul Kelley Russell Kenney, John Lynch, Richard Paulsen, Joseph Ryan, G. Gary Sano, Arthur Connell, John Francouer, Lynn; Edward Cook, Robert Corneliusen, William Corning, Hope Crombie, Peer Johnson, Jr., Raymond Kennedy, Ernest Santin, Howard Wilson, Jr., Leavitt Moulton, Beverly; George Burkhardt, Robert Craven, Clifford Nelson, Donald Nelson, Earl Nicholson, Carl Schwarzenberg, Robert Searle, Howard Stone, Jr., Walter Winn, Jr., Thomas Derdarian, Methuen; Allyn Trask, William Bulgo, Francis Costello, John Draper, John Hocter, Jr., Lewis Johnson, Lawrence Millea, Michael Rabchenuk,

(Continued on page 3, col. 1)

Topsfield Fair

More than ten thousand spectators at the Topsfield Fair visited the exhibit of this School. It is no wonder that the majority of these were homemakers, interested in a display of the work accomplished by the School's homemaking department.

Model rooms, designed and executed by students and their instructors tended to indicate the influence of simplicity, denoting good taste. It is the object of the Department, whether in foods, clothing, or home decoration classes, to see that this characteristic prevails.

Prize Winners

Many students in the agricultural department of the School entered exhibits at the Fair. The following merited prizes for their displays of fruits, vegetables, and flowers:

Gilbert Wallace of Bradford, 8 first prizes, 5 seconds, and 3 thirds, totalling \$7.75; Elmer Luxton, Wenham, 2 firsts and 2 seconds (\$2.50); T. A. Nimmo, Methuen, 1 first and 1 third, \$.75; Merle Graffam, Lynn, 1 second \$.50; Walter Tataronis, Salem, 1 first, 1 second and 1 third (\$1.25); John Zielski, Peabody, 1 first and 1 second (\$1.25); Lorin G. Clark, Merrimacport, 2 thirds; Lawrence Shanks, Essex, 2 firsts, 1 second and 2 thirds (\$2.00); Fred B. Scribner, Topsfield, 1 third; Myron Eastwood, Methuen, 1 second and 1 third (\$1.50); Leonard Briody, Beverly, 3 firsts (\$2.25); Richard Colby, Haverhill, 2 thirds; Charles Chambers, Jr., Ipswich, 1 second (\$1.50); David Ellwell, Essex, 1 first, 2 seconds (\$1.75); James Nicoll, Ballardvale, 1 second, 1 third, (\$1.50); Warren Towne, Beverly, 2 thirds; and Stanley Prophet, Haverhill, 1 third. Gilbert Wallace was awarded sweepstakes honors for the largest display of prize-winning fruits and vegetables.

Judging Results

Mildred Hills of Byfield and Lawrence McDermott of Danvers, placed first and fourth, respectively, in a plant judging contest. Forrest Haynes of Haverhill, representing the 4-H club placed second in vegetable judging.

Fruit Exhibit

Exhibits of new varieties of fruits, with which the school has spent some time experimenting, were a feature of especial interest at the Fair.

Pruning

It is still desirable to prune certain plants which are growing rapidly, assuming ungainly shapes or growing out of proportion. Do not, however, encourage severe pruning as it may produce a rapid rate of growth of the tender shoots which will not be hardy and which winter will kill back.

The Potato Act

F. C. Smith

Inquiries are coming in asking for information about the potato control act. As a federal, state, and county employee I must help administer this act.

It takes effect December 1, 1935, and will last at least one year.

All persons selling five bushels of potatoes, or more, in any year, come under the act.

Massachusetts will be allotted its quota of tax-exempt potatoes by the Secretary of Agriculture. The State Committee will allot a quota to Essex County. A committee of potato growers in Essex County will divide the county quota among the towns. Thus it will sift down to individual farmers. The town committee will check the records of individual farmers and on the basis of the highest production of two years out of three (1932-1934) it will allot these farmers their quota. Tax-exempt stamps will be furnished them up to this quota.

All tax-exempt potatoes which are sold must be in closed packages on which tax-exempt stamps have been affixed. All surplus potatoes sold must be in closed packages with a tax stamp affixed. Tax stamps may be secured at local post offices at a cost of forty-five cents per bushel.

Penalty for Violation: \$1000. Second conviction: one year imprisonment in addition to fine.

Transfer: No transfer of stamps is allowed.

It is not yet clear how sales by producers at roadside stands will be covered.

NEW STUDENTS

(Continued from page 2)

Peabody; Wilfred Desmarais, Warren Killam, Raymond Pearl, Fielding Rogers, Hugh Russell, Arthur Walker, Wilbur Woodman, Jr., Danvers; John Crosbie, Norman Everett, John McDonough, William Strong, Thomas Margerison, Lawrence; Joseph Mattera, Chester Clinch, Alfred Maucina, Leonard Duratti, Swampscott; Henry Alto, Joseph Arnold, Percy Curtis, Jr., John Natti, Gloucester; Ralph Berrett, Jr., Russell Burton, Milton Edmands, Edward Shields, Jr., Saugus; Frank Downs, John Papoulas, Charles True, Salisbury; John Fay, Frank Stacey, Marblehead; Alger Marshall, Frank Story, South Essex; James Nealey, Conrad Nollet, Andover; Robert Weaver, Paul Parker, Topsfield; Edward Cauty, Harold Dossett, Salem; Philip Clark, Kenneth Houston, North Andover; Nicholas Diliso, West Peabody; Rhea Gosselin, Haverhill; Sidney Johnston, Lynnfield Center; John Kuke, Amesbury; Leroy MacAloney, Groveland; Albert Rock, Byfield; Chester Silva, Rockport; and George Woundy, Newburyport.

Rye Adjustment Program

The United States Department of Agriculture has authorized the following statement for release for the benefit of those people interested in the rye adjustment program:

"The proposed Rye Adjustment Program calls for no restrictions in the acreage of either fall seeded or spring seeded rye. It provides for the establishment of a base rye acreage harvested as grain. It calls for a minimum planting of 54 percent of the base acreage for harvesting as grain. It calls for the harvesting of rye as grain of not more than 75 percent of the base acreage. Any acreage of rye in excess of the 75 percent of the base acreage may be used for hay, pasture, or other purposes, except that such acreage must not be permitted to mature and produce rye grain. The difference between the 75 percent of the base acreage and the base acreage will be adjusted acreage and must be used in a manner similar to adjusted wheat acreage. Rye acreage used for other purposes than harvesting as grain may be designated as adjusted acreage."

Is Your Land Active?

In taking exception to the common belief that land should be rested every few years, Professor R. W. Donaldson, extension agronomist at Massachusetts State College, declares that land cared for in the right way does not need this proverbial rest. Proper use of green manure crops will furnish the needs of the soil and will aid greatly in improving the land.

Seeds for manure crops and extra dairy feed crops should be sown now. Green manure crops are valuable in conserving nitrogen that would otherwise be lost, and in providing the needed organic matter to keep the soil in its best condition. At the present time when stable manure is difficult for farmers to obtain, green manure crops serve a real purpose.

Availability of extra feed next year which is of importance if there is danger of a shortage in the hay supply before pastures are ready, is a value attributed to crops sown now. Winter rye can be sown with safety during the whole month of September.

One and one-half to two bushels of rye per acre is the seeding recommendation of Professor Donaldson. He emphasizes planting winter rye as soon as possible so that the plants may develop a root system before the ground freezes. Good root systems will allow the plants to withstand the winter cold.

Winter wheat, winter vetch and barley are other crops which may be used for winter planting.

Control of Bean Weevil

Numerous requests have recently come to the attention of the County Agricultural Agent relative to the control of bean weevils.

The beans should be placed in a tight receptacle and the seed treated with carbon bisulfide, an explosive which should be used with caution and away from the vicinity of fire. It is a clear, yellowish liquid with a disagreeable odor, used for treating seeds to kill weevils and other insects.

A small bucket or can, fitted with an air-tight cover makes a good fumigator for a small portion of seeds. The seed is placed in the bucket and carbon bisulfide, poured on a piece of rag or waste cotton, is dropped on the seed. A teaspoonful of liquid on a saucer on top of the seed is enough for a one-gallon bucket. The lid should then be fitted on and kept tightly closed for 24 hours, after which time the seed should be removed and thoroughly aired.

Treatment for large quantities: Carbon bisulfide forms fumes which are heavier than air. Hence the liquid should be placed in open earthen basins, shallow pie tins or plates, on top of the beans in a large bin, and the entire bin covered with a canvas. Seeds are not poisoned by this treatment.

Carbon bisulfide may be used in a proportion of from 10 to 20 pounds to 1000 cubic feet of container, the amount depending on the tightness of the container. 24 to 48 hours is sufficient time for the treatment.

F. C. Smith

Public Speaking Honors To Ohio Boy

On September 19, Earl Blayney of Ohio won first place in the North Atlantic Regional public speaking contest at Springfield. In March the final elimination contest will be held at Kansas City.

This is an annual contest, sponsored by the Future Farmers of America.

Lawn Mowing

Lawn mowing should be continued as long as the grass is growing rapidly. Many people plan to stop their lawn mowing after the first of October. This is a definite mistake as it makes the work in the spring of the year just that much harder. It is preferable that the lawn be mowed late in the fall and the edges trimmed before winter. You will find that it will go into the winter in this condition without winter injury, and it will be much easier in the spring to simply go over it with a rake and remove foreign material such as branches and twigs, which have collected there.

Round About the County

Home Nursing

The Salem home nursing group, including mothers from Salem, Peabody, Marblehead, Danvers and Beverly will meet at the Salem Hospital nurses' home starting on Monday evening, September 30, at 7.30 o'clock.

Classes started in South Groveland on September 24 with Mrs. Charles Sweetser, 769 Salem St., in charge of enrollment.

The Rockport home nursing group will meet at 2.45 P. M. on Friday, October 4. Enrollment is under the direction of Mrs. Pauline W. Parsons.

All groups in home nursing are under the direct supervision of Mrs. Mary E. Roundy, R. N., and an instructor in Child Care at this School. Clothing

Clothing classes supervised by Mrs. Mary M. McIntire, Home Demonstration Agent, will meet at this School at 1.30 P. M. on October 4, 11, 18 and November 1, 8, 15. Classes will also be held at the Middleton Sanatorium, for patients, beginning October 7.

Home Accounts

Miss Grace B. Gerard, State Home Furnishing Specialist, of the Massachusetts State College, will conduct classes in Home Accounts at the Hamilton Community House, September 27, October 25, and December 13. Classes will meet at 1 P. M. Anyone who is interested in joining the groups is asked to consult Mrs. Harold Nelson, Cummings Ave., Hamilton.

Similar classes will be held in West Andover on October 24 and December 12, starting at 10.30 A. M. and closing at 3.30, meeting at Mrs. Alexander Crockett's home, Woodlawn Rest, South Main St.

Miss Gerard has just returned from a summer spent in study at the University of Chicago.

Home Grounds Improvement

October 29 is the date of the first lecture in Beverly on Home Grounds Improvement by A. M. Davis, Horticulturist, of the Massachusetts State College. Miss Edith Wylie, 31 Pierce Ave., Beverly, is in charge of enrollment.

On October 8, November 26, and December 10, Mr. Davis will lecture at the Boston Yacht Club, State St., Marblehead. Mrs. Lewis Doane, 16 Washington Square, is in charge.

Fall Vegetables

Radish and lettuce at this season may be sown in a cold frame and can be depended upon for a continued succession until Thanksgiving. It will require protection on cold, frosty nights but the protection is worth the effort for producing.

Gourds

Many of you who have read these pages in the past will recall that last spring reference to the planting of gourds was made. The season for harvesting gourds has arrived. They may be picked green, fully ripened, or in various stages between. The fully ripened ones, of course, will keep for a much longer time than will the green ones. The green ones add interest to piles of gourds on platters.

These plants have no economic use as far as food is concerned. Occasionally they are used in the form of utensils. A satisfactory way of using gourds is to mound them in colorful heaps on an antique platter or chopping bowl. They will usually last until December. When they begin to show signs of decay they should be disposed of by burning.

Chrysanthemum Protection

Chrysanthemums from now on should be staked and given protection against frosts and fed with good liquid manure. They should be sprayed with nicotine sulfate and soap to control aphids. Sulphur dust should be applied to the foliage to control mildew.

Well-grown chrysanthemum plants will give considerable color in the garden, up until the first of November and for that reason it behooves a gardener to spend, if possible, a little time to encourage these satisfactory flowers to get into good condition for blooming.

A. M. Davis

"Fish and Shellfish"

A new bulletin, extension leaflet number 151, issued by the Massachusetts State College, will not only teach you how and when to use fish and shellfish—but why. The quality and variety of nutritional factors in fish products, the digestible quality of fish, and the saving on food bills when using fish, are analyzed by Miss May E. Foley, author of the leaflet.

Clothing Project Prizes

Ribbons were awarded by the home-making department to the following girls whose summer clothing projects were judged this fall:

Freshmen: Lena Tela of Lawrence, first; Eva Deloge, North Andover, second; Barbara Clark, Lynn, third.

Juniors: Phyllis Thompson, Saugus, first; Evelyn Young, Lynn, second; Evelyn Homan, Wenham, third.

Dahlias

Dahlia tubers should be dug as soon as the tops have been frosted. That is as soon as the tops have taken on a black appearance. The tops are cut off and the clumps taken out and for an hour or more are dried off. At this time they can be stored upside down for a few weeks in a frost-proof cellar.

If the cellar in which they are stored is heated it is well to cover the bulbs with a coarse sand, fine gravel or peat moss. A storage temperature of about forty degrees is about right for these plants. Dusting the tubers with sulphur is said to prevent considerable rot.

A. M. Davis

Recipes

Fig Pudding

Mix dry ingredients. Add sugar and eggs. Steam two hours.
3 ounces suet
½ pound figs
2 cupfuls stale bread crumbs
½ cupful milk
2 well-beaten eggs
1 cupful sugar
1-3 teaspoonful salt

Hard Sauce

1-8 cupful butter
Grated rind of 2 oranges
1 cupful brown sugar
Cream butter and sugar, add orange rind. The secret of creamy sauce lies in long beating. Chill before serving.

Stuffed Lamb's Liver

1 lamb's liver 3 tablesp. butter
1 1-2 cups bread Salt to taste
1-2 onion (if liked) Water
4 strips bacon
1-2 cup stewed tomatoes
1-2 green pepper

Have the butcher cut a pocket in the liver. Wash well, and dry on a clean cloth. Stuff with filling made of the dry bread, chopped onion, green pepper, and highly seasoned with the salt. Moisten with the melted butter and just enough water so it can be molded. Fill the pocket as full as possible and cover with the strips of bacon. Put in a pan with very little water and bake for 45 minutes. Add the tomatoes. Cook for 15 minutes longer. Serve with a garnish of parsley and thin slices of lemon.

Pork Liver (Country Style)

4 slices salt pork 1 tablesp. flour
1-2 lb. sliced liver Seasonings
Fry the salt pork until golden brown; remove to a platter to keep warm. Wipe the liver with a damp cloth, roll in cornmeal and fry until nicely browned. Season to taste with pepper and salt. Remove to a platter, add the flour to fat in pan, and stir until it thickens and is smooth; if too thick add a little boiling water. Season and pour over the liver.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 16

HATHORNE, MASS., OCTOBER, 1935

NO. 9

Garden Chrysanthemums

The reign of our autumn queen of flowers is at hand. As a foretaste of the glorious November Chrysanthemum festivals celebrated in exhibition halls, conservatories, and green-houses throughout the land, the recent display of garden chrysanthemums at Horticultural hall, Boston, was truly invigorating. Two great collections of all that is best in outdoor chrysanthemums featured the floral part of the annual Fruit and Vegetable show of the Massachusetts Horticultural Society. These were by the Bristol Nurseries of Bristol, Connecticut, and James Wheeler and Son of Natick, both medal winners.

Long years of testing early blooming hybrids of the common Chrysanthemum (*C. coreanum*) upon our pro-a few outstanding winter hardy varieties. Early Bronze, October Girl and R. Marion Hutton are among these. Formerly of the pompon type, the modern trend is toward the graceful, informal patterns. Where this may lead to, no one knows. For one thing, with the shading, mid-season of November bloomers, we may soon be enjoying the finest of the florists' large blooms in our gardens in October.

Apart from all this, the Boston show brought to the fore the mighty influence of the Korean Chrysanthemum (*C. koreanum*) upon our progress "Mumward". The new race of Korean hybrids affords such brilliant contrasts to the species as Apollo, Daphne, Vulcan and others. And then, to top off the hopes and enthusiasms aroused by the Korean hybrids along comes a break away from the Arctic Chrysanthemum (*C. arcticum*) in the shape of a seedling named Astrid, a break that is destined to put even more cold resistance into the numerous hybrids that are to follow. Astrid, seen at the show as a three-year clump, is essentially pale pink with clear yellow centers and clean, bright foliage that holds well into November. Under electric lights the blooms appear gilded, suggesting their admirable adaptation to indoor arrangements. Now *C. arcticum* has been an admirable rock garden inhabitant, low in stature, very hardy, with dark green foliage and large white blooms

(Continued on page 4, col. 1)

Regional Market

C. F. Dutton, for eight years auctioneer at the South Terminal Market, is auctioning fruits and vegetables at the new Boston Regional Market at West Cambridge every Monday and Thursday at 2 P. M.

Features of AAA Amendments

Many farmers are wondering what the AAA amendment passed by the last Congress really amounted to. Here is a list from S. G. Rubinow, Director of Information, of the American Farm Bureau Federation, giving a brief description of the contents of the amendment:

The highlights of the amendments are as follows:

1. No suits for recovery of processing taxes are permitted without evidence to the Internal Revenue Commissioner that the processor has absorbed the full tax.

2. Injunction suits restraining the collection of processing taxes are allowed.

3. All present processing taxes and all adjustments of production contracts are legalized.

4. The duties of the Secretary of Agriculture are "spelled out" to avoid any undue delegation of powers.

5. The Interstate Commerce clause is reworded throughout the Act in line with Supreme Court wording.

6. One-third of all customs receipts are made available for export subsidy or for financing control programs.

7. Authorization is given for reduction of competing imports by as much as 50 per cent.

8. Processing taxes at reduced rates are permitted during the life of present adjustment programs when prices go as high as 20 per cent above parity.

9. The Warren potato program is included with farm allotments and also with a tax of three-fourths to one-half cent per pound, but cooperating producers are exempt of this tax.

10. Ten Million Dollars are appropriated for the control of cattle disease this year, this being in addition to present funds for that purpose.

11. Funds are available from Works Relief appropriations to finance existing submarginal land options.

12. Instead of licenses, "orders" will be used to enforce marketing agreements.

13. All canned fruits and canned vegetables, except asparagus and olives, are exempt from these "orders", which take the place of marketing agreements.

14. These "orders" are permitted without the consent of handlers of

(Continued on page 3, col. 2)

COUNTING THE COWS



An Egyptian herdsman, in the presence of his herd, reports to his master while a Scribe takes his reckoning in writing.

New Bulletins

The sources of the following recent or revised bulletins are designated. The bulletins and leaflets may be procured free of charge through these sources:

Farmers' Bulletin No. 1752. "Spray Residue Removal from Apples and other Fruits," Essex County Agricultural School, Hathorne, Mass., (through F. C. Smith). This bulletin covers not only apples, but peaches, pears, grapes, cherries and currants.

Bulletin No. 368. "Spray Residue Removal from Apples", Maryland Agricultural Experiment Station, College Park, Maryland.

Bulletin No. 311. "Spraying and Dusting Apples: Costs, Grades of Fruits, Returns", Pennsylvania Experiment Station, State College, Pa.

Do You Like It?

With this issue of the Essex Farmer and Homemaker comes an innovation: a two-page supplement which this month is devoted to news of our alumni. If this experiment is successful, if it is received favorably, and if an increased number of subscriptions warrant it, a two-page supplement will be included in every other issue of the paper. Such a supplement would include news of the alumni, and School activities as seen by student editors. It is hoped that in time such a section will be a permanent part of this small paper and that a wider scope of information may be included.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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Calendar

October 22—Discussion group with
the County Agency to consider agri-
cultural economics as it relates to
farmers in Essex County. 8 P. M.
at this School.

October 23—Essex County Poultry
Association banquet at this School.

October 29—Home Grounds Improve-
ment. A lecture by A. M. Davis in
Beverly.

October 31—Open meeting at this
School for all interested in Recreation.
Miss Ruth McIntire, speaker.

November 8 and 9—Vocational judg-
ing at the Massachusetts State Col-
lege.

November 14—Annual meeting of the
Essex Agricultural Credit Union.

(Continued on page 4, col. 2)

For the convenience of new subscribers to the "Essex Farmer and Home-
maker", the form printed below may be cut off and sent to the School in care
of Miss Elizabeth Weston.

I hereby subscribe to the "Essex Farmer and Homemaker" for the year
(years) 19..... at twenty-five cents per year, and enclose a money order
(cheque) for dollars.....cents, to cover the subscription rate.

Name

Address

Garden Project Proves Worth

Two million pounds of fresh vege-
tables will be supplied to Massachu-
setts families this winter from WPA
gardens in 25 towns and cities, ac-
cording to William R. Cole, exten-
sion specialist at the Massachusetts
State College, and supervisor of the
WPA garden and canning project.
Under this project, formerly admin-
istered by ERA, over 700 acres of
area gardens produced enough vege-
tables to supply 5 pounds a week to
17,000 persons from November 1 to
May. In 5 other towns there were
1000 individual gardens supervised by
ERA. More than 1000 men were given
employment.

Thirty communities also established
canning projects, Mr. Cole stated.
These canneries, employing 800 wo-
men, are now producing more than
125,000 cans of vegetables a week or
enough to furnish two cans a week to
400,000 persons during the winter.

Mr. Cole pointed out that towns and
cities are finding the garden and can-
ning project invaluable in providing
better nutrition for those dependent
on relief for their food supply, and
that a definite improvement in the
health of recipients has resulted.

"In addition to the health benefits,"
Mr. Cole said, "the garden and can-
ning project has reduced the welfare
load of communities and provided in-
teresting work for men and women."

Dairymen Need Better Records

The greatest need of the dairy in-
dustry in Massachusetts is more and
better dairy records, according to C.
J. Fawcett, livestock specialist for
the Massachusetts State College ex-
tension service.

"Better cows, better management,
better buildings and equipment and
better crops are all very important,"
says Mr. Fawcett, "but I think the
reason we do not have better dairy
herds and better production is that
livestock men do not have sufficient
records on which to base their breed-
ing program."

It is only by knowing the facts
that dairymen can improve their dairy
herds successfully.

News of the School At a Glance

October 9

Dairy evening classes under the in-
struction of John E. Eastwood started
in the dairy laboratory. These class-
es (the enrollment for which is now
filled) meet every Wednesday eve-
ning.

October 10

An evening unit course in poultry
raising had its first meeting with J.
Stanley Bennett, instructor. Classes
will be conducted on Tuesday and
Thursday evenings until the end of
the term. A limited membership
makes applicants ineligible after the
opening class.

October 11

Captain Stanley Osborne, an Aus-
tralian by birth and a traveler by
habit, illustrated for the students of
the homemaking and agricultural de-
partments, a lecture on the Union of
South Africa.

October 15

A contest in muffin-making was
open to members of the High School
Special classes. Participation was one
hundred per cent, and the following
girls were judged the winners: Abby
Ellis of Essex, first; Ruth Odell of
Marblehead, second; and Margaret
Gallagher, Methuen, third.

October 16

A silver medal was awarded to the
School for its exhibit of fruit at Hor-
ticultural Hall.

Frank Conti of Lynn, placed first
in the vegetable judging contest at
the Horticultural show, and the
School team led, in competition with
several other schools.

Nuptials

Janet Brander (former student)
to
Mr. William Frederic Hartwell
Saturday, October 12, 1935
Address: Malden, Mass.

Elizabeth Akerley (1933)
to
Mr. William A. Cooper
Saturday, October 12, 1935
Address: Reading, Mass.

Marie Antoinette Cote
to
Mr. James Henry Curren (1924)
Saturday, October 12, 1935
Address: Danvers, Mass.

Football Schedule

Coach Philip H. Couhig announces
the following fall football schedule:
October 4—at Wentworth
October 12—at No. Quincy High
October 21—at Lynn Classical 2nds
October 26—open
November 2—open
November 9—at Stoneham
November 15—Stockbridge here
November 23—at Keith Academy

ALUMNI JOURNAL SUPPLEMENT

1916 ESSEX AGGIE ALUMNI ASSOCIATION 1935

Vol. 1

OCTOBER, 1935

No. 1A

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Marion Dow Robinson, '25 Boxford sec.
Harold Dowding, '25 Methuen section
Mrs. Richard Murray, '23 Lynn section
Mrs. Josephine Burt, '23 Salem section

ALUMNI ACTIVITIES

Many graduates have frequently asked what the Association is doing. It won't be long now before you will see and hear and read what we are doing. We are swinging right into action with a crew of reporters, one in each section of the county. What are these reporters going to do? Well, each one has a list of every graduate in his section and he is going to make you and you and you a visit and check up on your address, and to bring our records of your activities up to date. We want to know whether you are employed or not, are you in business for yourself, could you employ an alumnus, and a host of other questions relative to the Alumni Journal. It has been so long since we have heard from many of the graduates that we are going out with this drive to look up and check up on every graduate. We feel that we can render a real service to every member of the Alumni Association provided we know where he is located and whether you are in business or not and last but not least if you are looking for employment. Time and again we have opportunities to place men in positions that will just be the thing he is looking for. We must first know your needs, we must know your qualifications and recommendations and where we can quickly locate you so that no time would be lost in closing the deal.

Through our exchange we hope to develop a better business program, a "Trade with Aggie" campaign so that we will all know about the quality products that this grad or that grad is pro-

ducing. Let's take advantage of this opportunity and help out each other. The place to make the contacts is in the Alumni Journal. Just write to the Alumni Journal, Essex Aggie, Hathorne, Mass. and let us know where you are, what you are, and what you have and we'll take care of the rest. Just as soon as we get a request for qualified men or women we can refer to your recommendations and immediately place the correct person in the proper position. It's up to you to get in touch with us if you want this service.

ALUMNI BANQUET

All hail the Class of '25

Three cheers for Captain Dowding! ! !

Don't forget, folks, that our Annual Event is just around the corner, and it's going to be a BIG event this year!

Yes, Sir, the Alumni Banquet and Dance will be held November 26, with the biggest celebration ever, for the 10th anniversary of the Class of '25. Boy oh Boy, what a class — what a football team — what spirit! I'll never forget the real cheers and support that this class had for every Aggie team, dance, or what-have-you. Again, classmates, it's your turn to return to Aggie with the same spirit. Remember the Coukos and Hanson basketball team, the Harold Dowding football team, Joe Murphy and Babe Ward, and how they played hockey. All these and many other reminiscences will be brought to the limelight once more by prominent members of the class and some of its favorite instructors.

Another big feature of the banquet is the initiation of one of the largest graduating classes ever to join our ranks. There will be about 47 girls and 43 boys receive diplomas this year. That's just a little different from 1925 when there were 19 boys and 25 girls, isn't it? Let's all turn out and give these new Alumni members the right kind of a start in our Association.

In view of the increasing number of graduates that attend the banquets we are asking that you make your reserva-

tions early and we will have to limit the attendance to those who are paid members in the Association and their wives, or husband, or friend.

There is a change in our program of events this year. The banquet will be held first, at 6:30 o'clock, in the Homemaking Building, followed by the business meeting in Room 38 in the Agricultural Building. This will allow more time for business which we have had to eliminate other years. The Alumni Dance will start at 8:30. So, come one, come all, and make this Gala Party your party.

JOIN THE

ALUMNI ASSOCIATION

You know there is an old proverb that goes like this, "A chain is only as strong as its weakest link." I know you don't want to be the weak link in this Alumni chain.

Do you know that the Alumni Association was responsible for assisting several students through the School by contributing \$100 to a Loan Fund? Do you know that we offer cash prizes for achievement in academic work each year at graduation? We started the ball rolling for the new Athletic Field, secured the sanction of the Trustees and Director Smith for this project, and many other things such as contributing to the Athletic Association, running an Athletic Banquet for the lettermen and students of the School, keeping up the tradition of the good OLD AGGIE spirit. These have been well received and a great time for the boys and girls here at school. These and many more constructive activities should be carried on by the Alumni Association, but we need strength and force and closer contact with each of you. We need your ideas and co-operation. Can you imagine carrying on all these activities with only 102 paid members in the Association, out of a total of over 1,000 graduates? Not only did we do that but we have built up a treasury balance of over \$350. Just think what we could do with a thousand paid members.

RESERVATION BLANK

ALUMNI BANQUET AND DANCE, November 26, 1935, 6:30 P. M.

Real Turkey

Mr. Horace J. Shute
Essex County Agricultural School
Hathorne, Mass.

Closing date Nov. 23

Dear Secretary:

Enclosed please find money order for \$..... for which please send the following tickets—

- ☐ Banquet tickets at \$1.00 each
☐ Dance tickets at 50¢ each
☐ Dues at 50¢ including Alumni Journal

Name Class
Address

MORE ALUMNI ACTIVITIES

Again we try to bring to your attention the fact that the Alumni Association is alive though not very strong. A great deal of credit is due to Mrs. Richard Murray (Marie Pension) for all the work and effort she has put into our new Alumni organ, the "Alumni Journal." We have made a start, due to her efforts, and now it's up to all of us to keep it going, it's our obligation to write for this paper, to take an ad. if we are in a position to, and, last but not least, apply for a subscription to it, which is only the payment of our dues. We want every Alumnus to receive this paper. We want to strengthen the Association, so send in your dues at once and become a subscriber to the Alumni Journal.

A WORD ABOUT THE ATHLETIC FIELD

Can you visualize an Essex Aggie football team playing on a smooth, level, green field; or an Essex Aggie track team running on a hard cinder track with bleachers filled with Essex Aggie cheering students? This will be true and a lot more to go with it such as a real baseball diamond, two or three tennis courts, a real up-to-date athletic field for Dear OLD AGGIE. This has been the dream, I know, of many, many Aggie graduates, and at last we have at least the hopes of such a field and we feel quite sure that by the time we come together for the Annual Banquet we will be able to show you some progress being made on this new field. Director Smith has been the biggest booster and worked unceasingly from one day's end to another to make this a reality. We are greatly indebted to him, and to the Board of Trustees for their efforts, for they alone have made this possible.

Plan to come back early on the 26th of November and watch the progress as this new field begins to take on a real playground effect. Your support and backing will be greatly appreciated I know, and a word of appreciation from you to the Director for his work in this undertaking will give him greater encouragement to carry on and build the greatest little athletic field in Essex County. I believe that the Alumni should have a contribution in this field and that we should have the honor next fall of playing the first game of football against the varsity team on this field.

HAVE YOU HEARD:

Our sectional reporters are certainly on the job. Already they have sent in the following information that is news at least to us.

FLASH: Many of you will be interested to know that friends and relatives of Miss Helen Lewis, Class of '20 attended a very lovely wedding at her home last Saturday night, October 12 when she was married to Clayton Northey also of Andover. Our congratulations go out to Miss Lewis.

FLASH: The Secretary received the announcement yesterday of the arrival of a 10 pound girl, Nina Marion, and the proud parents are Mr. & Mrs. Douglas

Rogers of Byfield. Mrs. Rogers was Emily Jordan, '28. We all remember Doug, star basketball player and track man, who graduated in '26.

FLASH: Dan Cupid struck the hearts of another pair of loyal boosters for Dear Old Aggie, when on July 3 Miss Blanche Burnham, Class of '19 was married to Robert Nelson of the same class. We all wish them good luck and congratulations.

FLASH: If it's bouquets you want, Curran Brothers of Danvers can furnish them, but here's a bouquet to you, fellows of the Class of 1924, from James H. himself, for on October 12 he was united in wedlock to Miss Marie Cote also of Danvers. Orchids to you, Jim.

FLASH: Evidence of the training that Mr. Stearns gave the Class of 1923 is perhaps revealed no better than on the farm of Harold Rogers, for sometime during September he married Miss Beatrice Farnsworth of Andover. Congratulations, Harold. May you succeed in the future as you have in the past.

FLASH: From our Danvers correspondent we learn that Miss Louisa Russell '18 is now Mrs. Wood residing in Essex, Mass.

Miriam Pohju, Class of 1930 is now Mrs. Knutilla and resides on Spencer Street, Peabody.

Esma Buck, Class of '22 is now Mrs. Kenney residing at Rear No. 7 James St. Peabody.

From Andover we learn that Robert Lewis is married and has one son, Robert. He is still working for the Davey Tree where he has been employed for the past nine years. His address is Fulton, New York.

From Amesbury—Elva Ross, Class of '28 is now a dietitian at Essex San.

From Salem—Irene Burbeck and Marguerite Sexton both of the class of '35 are enrolled in the Home Economics Department of Nasson College, Springfield, Maine.

Eleanor Tucker, class of '34 and Pauline Morrisey, class of '35 are in training at the Salem Hospital.

Mary Guppy, class of '33 of Danvers is in training at the North Shore Babies Hospital.

Mary Peterson, class of '34, of Salem has entered the Household Nursing School on Newbury St., Boston.

Genevieve Pasquale, class of '35, and Roberta Thompson, class of '35, both of Lynn, are in training at the Beverly Hospital.

Hazel Ogden, class of '35, of Newburyport is employed at Tuscarora Candy Store of that city.

Dorothy Lowe, class of '35 of Lawrence is employed at "Fairview" a rest home in Rowley.

Ruth Hull, class of '35, of Saugus, and Margaret Foss, class of '35, of Essex, are assisting in the foods laboratory at Essex Aggie, while Dorothy Thorne, class of '35, of Saugus, is the assistant in the Clothing Department.

Frank Cutting, class of '34, of Gloucester, paid the school a visit recently and informs us that he is operating a general farm near Bath, Maine.

FLASH: The Alumni Journal will be out on or before graduation with more news of Alumni doings. Be sure and get your copy.

AGONY COLUMN

Do you know the whereabouts of any of the alumni listed below? We know the addresses are incorrect, but they are the last ones we have for these people.

William Dow '18; 130 Euclid Ave., Lynn
Frank Hersey '20; R. F. D. Nashua, N. H.
Ernest Howe '24; 264 Main St., Medford
Joseph Murphy '25; 27A Herrick St., Beverly

Victor Poirier '16; 9 Summer St., Salem
Roger Peabody '30; We know he is at a CCC camp, but where?

Elliott Prime '16; Central St., Rowley
Donald A. N. Scher '20; 5 Nursery St., Salem

John A. Wood '21; 16 Brackenbury St., Beverly

George B. Constantines '24; Anchor Rd. Lynn

Gordon F. Woodberry '18; 270 7th Ave. New York City

Robert Mooers '28; 6 Green St., Amesbury

Mildred Annan '17; (Mrs. James J. Clark) 419 Johnson St., North Andover

Gladys Atherton '24; 340 Maple St. Lynn (Mrs.?)

Edna Bamford '29; Andover (Mrs.?)

Lovella Baxter '24; 74 Pleasant St., Newburyport (Mrs.?)

Leona Brown '32; Ash St., Danvers

Ruth F. Burbeck '16; 99 Montrose Ave. Buffalo, N. Y. (Mrs. Ernest B. Frey)

Ruth M. Carlson '29; 1 Hamilton St., Danvers (Mrs.?)

Olga M. Carter '24; 46 Cabot St., Beverly

Marion E. Churchill '27; 44 School St., Gloucester (Mrs.?)

Olive B. Currier '22; Roslin St., Salem (Mrs.?)

Amy L. Fogarty '20; 47 1/2 Butman St., Beverly

Marion L. Hanson '22; 14 Giles Ave. Beverly (Mrs.?)

Hazel A. Henderson '26; Hawley St., Lawrence (Mrs.?)

Linda B. Hoyt '17; 51 Yale St., Bridgeport, Conn. (Mrs. William Todd)

Evelyn A. Hudson '29; 187 Arlington St., Lawrence (Mrs. ? Lorenz)

Iona Hurd '27; 17 Clark St., Georgetown (Mrs. William Houle)

Esther Meyers '25; 57 Chatham St., Lynn

Evelyn M. Newhall '24; 126 Williams Ave. E. Lynn (Mrs. B. M. Wallace)

Helen E. Rice '24; c/o Y. W. C. A. Wilmington, Delaware

Evelyn Scobey '26; 249 Maple St., Dan. Lois Vance '28; Box 321 Gloucester (Mrs.?)

Stella Wozniak '30; 70 Salem St., Salem (Mrs.?)

Care of Pullets After Housing

The transfer of pullets from a green, grassy range to within the limited area offered by four walls of a poultry pen with its dry litter and limited sunlight presents a drastic change in conditions. The poultryman needs to do everything possible to help the birds get adjusted to their new environment. If birds do not become familiar with the nests early but form the habit of laying on the floor, it is difficult to break this tendency, and the floor layers leave themselves wide open to cannibalism. This vicious and expensive habit should be avoided if humanly possible and it will pay good dividends if the operator will occasionally go through the pen when production first gets underway and gently place the floor layers on the nests.

The litter in the pens when the birds are first housed should not be more than an inch or so in depth, especially if scratch feed is to be fed in the litter. Otherwise pullets may not find their usual quota of scratch feed for a few days, and may thereby be thrown temporarily out of stride. It is equally important that they find the mash from the beginning, and if all the hoppers are from 12 to 18 inches above the floor, this may not be the case. It is recommended therefore, that some hoppers be placed on the floor until the birds learn the location of the regular hoppers. (Many poultrymen now use hoppers which are just high enough so that litter will not be scratched into them.)

If pullets have been accustomed to comparatively low roosts while on range, they may not readily locate the comparatively high ones in the rear of the house where it is dark, especially if the birds are brought in from the range in daytime. If the poultryman begins promptly after housing to see that all birds are placed on the roost at night his labors are usually rewarded in a few days by the birds going on of their own accord. If attention is not given promptly, then there are likely to be several individuals which will insist on roosting in the nests or on feed hoppers. Still others may huddle on the floor in groups, which is even worse, as these are always the first ones to pick up colds and spread them through the flock.

If fall colds develop in the flock, probably one of the easiest methods of handling the situation is by spraying HTH15 powder (a chlorine product) with a dust gun about the heads of the birds when roosting at night. A strong vapor is created, and this treatment may be repeated nightly until improvement is noted. It is assumed that the operator will take care of any faulty conditions such as draft or poor ventilation, because no amount of spraying will correct these faults.

Make Your Woodlots Produce More Dollars

Thirty-three and four tenths per cent of Essex County is in woods. This area is about equally divided in pine, oak, maple, and birch. There are very saw mills left at present. The cut of wood is used principally for fire wood. Most people, however, do not look with favor on pine for fuel. It therefore is necessary for the woodlot owner to carefully consider how best to utilize his woodlot.

Dairying is the principle pursuit of Essex County farmers. Large amounts of bedding materials are necessary in producing quality milk. Since our farmers are buying increasing amounts of western grains, a much smaller proportion of this bedding material is being produced on our farms. The shortage is being made up by the use of more sawdust and shavings which our diminishing sawmills are unable to supply.

Woodlot owners can receive steady incomes from their woodlots. Diseased trees, forked and crooked trees as well as dead and dying trees and some of the slash that has practically no commercial value as fuel can be put through machines which reduce them to sawdust and shavings.

Therefore, woodlot owners, clean up your woodlots. Lessen the fire hazards. Liberate your young trees and at the same time meet the increasing need for bedding.

G. A. Meigs

A. A. A.

(Continued from page 1)

farm products, if favored by two-thirds of the producers.

15. Books and records may be examined in connection with the execution of "orders."

16. Except in the case of milk, minimum purchase price is not permitted in "orders."

17. The ever normal granary plan is authorized.

18. Processing tax rates are set for rye and barley.

With shortening days to consume feed, and with increased demands for it through increasing production, growth, and colder weather, a real feeding problem is presented, especially with early hatched pullets. The use of lights to extend the normal day is a convenient approach to this problem when lights are available. For those lacking lights increased mash consumption may be brought about by the use of wet mash, and heavy feeding of scratch feed at night will increase the total feed intake, and total intake seems to be of greater importance in maintaining weight and production than mash and scratch balance.

J. Stanley Bennett

New Figures For Old

Census figures are generally worth studying to show trends. The recent 1935 census shows that the cattle in Essex County total 12088 as compared with 20239 in 1910. The loss in dairy products however, during the period from 1910 to 1930 was offset by a gain in poultry products of \$604,396 during the same period.

Acreage in potatoes dropped from 1619 to 678; cabbage from 498 to 456; squash from 260 to 201, all hay land from 42,049 to 22,000 acres; carrots from 361 to 143; and onions 96 to 74.

The more intensive crops increased during this period: asparagus from 18 to 53 acres; snap and string beans from 138 to 229; beets from 78 to 91; celery from 42 to 71; cucumbers from 60 to 80; lettuce from 35 to 112; green peas from 85 to 135; spinach from 33 to 264; tomatoes from 217 to 244; and mixed vegetables from 53 to 1013.

All vegetables plus potatoes increased in acreage from 4744 in 1920 to 5049 in 1930.

The land available for crops increased from 48000 to 53000 acres. Land in farms has varied from 176,889 acres in 1900 to 130,244 acres in 1935.

Woodland has increased somewhat in area. Alfalfa increased from 40 acres in 1910 to 491 acres in 1930.

All these figures seem to indicate one thing: that there are constant changes and adjustments being made; that fixity does not exist; and the trend fluctuates from extensive to intensive types of farming.

F. C. Smith

Chili Pepper Powder High In Vitamin A

It is through liberal use of chili pepper powder as a seasoning that Mexicans get much of their vitamin A requirements, says the Bureau of Home Economics of the United States Department of Agriculture. Mexican diet, because of its apparent lack of vitamin A, was a puzzle to nutritionists until someone suggested chili powder. Most peppers are known to be good sources of vitamin A.

For vitamin tests, the Bureau used the particular variety of pepper (chili ancho Colorado) most extensively dried and ground for chili powder. These peppers formerly were imported into this country from Mexico, but are now successively grown in Southern California. They do not do well, however, in New Mexico and Texas.

Preliminary tests indicate the vitamin A content of air-dry chili pepper is very high—two to three times that of a good grade of butter.

Garden Activities

By A. M. Davis

There are still very important garden activities to keep in mind and to be practiced this fall before the gardening season closes.

Bulbs

First of all there is the problem of digging up those bulbs, tubers, or corms, which are not hardy out-of-doors. The list of plants under this classification might well be Dahlias, Cannas, Gladiolus, Tube Roses, Tuberous rooted begonias, Red Hot Pokers, and other particularly choice plants which you may be growing, that will not withstand our severe winters. The problem of storing these roots to carry them safely through the winter is probably the biggest difficulty that the gardener has. First of all in each case let me recommend correct curing of the roots before they are definitely put into storage. In the case of Gladiolus, they should be quite dry. In the case of dahlias, they should be stored upside down after first having some of the surplus soil dried off the roots, and in the case of tuberous rooted begonias, cannas, and begonias I would suggest storage in a box of dry sand allowing the tops to first dry up completely before they are removed from the bulbs. Do not let a frost strike any of these roots.

Labels

Then there is the question of labels. All varieties of plants should be correctly labelled whether they are staying indoors or out. It may not be important if one grows only a few simple plants, but if one grows a large number of relatively choice plants it is quite desirable that these be labelled, for spring identification.

Hotbeds

Let us consider hotbeds as a means of protecting plants. Fuel, in the form of heating manure, may be dispensed with if the tender perennials, placed in the hotbed, are covered with a heavy layer of oak leaves, not packed down, under the glass cover.

The final problem is that of fall clean-up. A great deal of the success of a garden depends on thorough fall clean-up. I would recommend careful going over of all planting beds at this season of the year, and removal of dead growth, peony tops and delphinium stems. These should be burned. Late fall weeding may sound mad, but next spring you will be grateful for the time saved by doing it this fall.

CHRYSANTHEMUMS

(Continued from page 1)

so the new seedling promises well as a parent to a new race of hybrids. The future? The autumn queen of flowers, reigning as never before in Essex County gardens, engenders a love for herself which will make florists glad after the hand of winter has stopped the brilliant outdoor show.

H. Linwood White

Play Days For Adults

For the first time the Extension Department of the Essex County Agricultural School is planning a series of six meetings of a recreational nature under the direction of Miss Ruth McIntire, State Recreation Specialist.

The first meeting of the series will be held at the Essex County Agricultural School on Thursday afternoon, October 31, at 1.30 o'clock.

The course will include play production (stressing one-act plays, staging, lighting, the art of make-up and acting), dramatic stunts, games, and social recreation.

Anyone who is interested in coming to the School on the opening date is requested to notify Mrs. Mary M. McIntire, Home Demonstration Agent. (Danvers 50.) There is no fee for these meetings.

Home Nursing

Mothers of small children make a large percentage of the home nursing groups taught by Mrs. Mary E. Roundy in the county.

Through the kindness of Mrs. Oliver Pratt, wife of the Superintendent of the Salem Hospital, the Salem class is able to hold its meetings at the Nurses' Home.

Mr. J. Asbury Pitman, President of the Salem State Teachers College, has given the use of a room also, at the Horace Mann Training School in South Salem for the Thursday class which was organized by Mrs. Carl Daley of Salem.

The Rockport class, organized by Mrs. Pauline Parsons, is holding its meetings at the Rockport High School on Friday afternoons.

Mrs. Leon Mahoney of South Groveland has kindly given the use of her home for the meetings held on Tuesday afternoons. This group was organized by Mrs. Charles Sweetser.

Lily of the Valley

This is one of the best seasons of the year for transplanting Lily of the Valley. Roots should be dug up and separated so that there are five or six definite growing shoots to each clump. The bulbs may now be planted about two inches below the earth's surface. Lily of the Valley beds will, if planted in this way, last up to four or more years. In planting them I would suggest that a fair amount of fertilizer be worked into the soil. For this purpose old, well-rotted barnyard manure is hard to beat and if one has available any bone meal it, too, worked into the soil, will be satisfactory from the standpoint of encouraging growth.

A. M. Davis

CALENDAR

November 21—Professor J. C. Graham of the State College, speaking to rabbit breeders on feeding.

November 26—Graduation and Alumni Banquet and Dance.

Potatoes and Onions

Because onions and potatoes are as good for adults as spinach is for children, the following recipes are being printed.

Onions With Bacon

4 onions 3 tablespoons hot water
1-8 lb. bacon 1-2 teaspoon salt
1-4 cup bread crumbs Dash pepper
1 tablespoon bacon fat

Peel the onions and cook them slowly until tender, but not too soft in boiling salted water. Then drain them. Scoop a small section out of the top of each onion; place the onions in a baking dish, then fill the cavities with chopped, uncooked bacon, and also lightly cover the tops of the onion with the bacon. Sprinkle with the salt and pepper and add the bread crumbs. Pour the bacon fat and hot water around the onions, and bake at 450 degrees F. until the onions are lightly browned—about forty minutes, according to the size of the onions.

Onion Soup

Peel and cut four onions in thin slices. Brown them in one and one-half tablespoons of margarin or drippings, add one tablespoon of flour and let it brown; then add one pint of boiling water, stirring constantly, that the result may be smooth. Cook for fifteen minutes, then add another pint of boiling water, one and one-fourth teaspoons of salt and one-fourth teaspoon of pepper. Serve with croutons and grated Parmesan cheese.

Cream of Onion and Cheese Soup

Melt two tablespoons of fat in a kettle and add four onions diced fine. Cook until the onions are browned. Then add two tablespoons of flour and one quart of milk, a little at a time, stirring constantly. When the soup is hot, add one cup of grated cheese and stir until the cheese has thoroughly combined with the onion soup. Season well with salt, pepper, and paprika, and serve with crisp crackers or croutons on top.

Potatoes on the Half-Shell

Select medium sized potatoes and follow recipe for baked potato. Remove the top of each potato so as to make it boat shape. Scoop out the inside, being careful not to break the shell. Mash very thoroughly (it is well to put them through a ricer) add butter or butter substitute, salt and hot milk and beat well. Pile the mixture lightly into the shells, do not smooth down the top, stand each in a shallow pan, return to the oven and brown lightly on top. A quick oven is required to brown the potatoes.

If the potatoes are too large for a single serving, they may be cut in two lengthwise and each half may be stuffed.

GRADUATION

November 26

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 16

HATHORNE, MASS., NOVEMBER, 1935

NO. 10

Science Day

The eleventh annual Science Day program was observed in Agricultural Hall on November 15. The guest speaker, C. W. Clemmer of the Eastern States Farmers' Exchange, an organization whose agricultural research has brought it fame, disclosed many interesting and scientific facts concerning the importance of the tuber unit index method for eliminating the spread of virus diseases in potatoes.

One hundred and two students revealed a growing interest in the meaning of Science Day in the preparation of exhibits more complete and more intelligible than any previous year's work.

Prizes Were Awarded to the following students:

Class I—Plant Reproduction: first Anthony Dichirico, of Swampscott; second, Stanley Prophet, Haverhill; third, Paul Kelley, Lynn.

Class II—Insect Pests and Diseases in Relation to Ornamental Horticulture: first, Charles Pettingill, Haverhill; second, Ernest Tarbox, Saugus; third, James Cashman, Peabody.

Class III—Insect Pests and Diseases of Fruit and Vegetables: first, Walter Tataronis, Salem; second, Myron Eastwood, Methuen; third, Charles Chambers, Ipswich.

Class IV—Poultry Science Exhibits: first, Lawrence Shanks, Essex; second, D. Woodward Walker, Salem; third, Bruce Barr, Peabody.

Class V—Ornamental Herbariums: first, Vincent O'Donnell, Lynn; second, Andrew Bye, Beverly; third, Rosario Richards, Salem.

Class VI—Herbariums: first, Vincent O'Donnell, Lynn; second, William Corning, Beverly; third, Gerard Hamel, Methuen.

Class VII—Herbariums (Tree Leaves): first, John Wilcox, North Andover; second, Lawrence Millea, Peabody; third, Donald Kelley, Lynn.

Class VIII—Feeds and Feed Collections: first, Earl DeVeau, Lynn; second, Robert Craven, Methuen; third, John McDonough, Lawrence.

Class IX—Wood Collections: first, Norman Peatman, Andover; second, Robert Corneliusen, Beverly; third, Peer Johnson, Beverly.

Unclassified (with definite Agricultural Relationship): first, Albert Col-

(Continued on page 3, col. 2)

SEASON'S GREETINGS



Christmas Wreath Construction

Making Christmas wreaths can be such a merry task it seems strange that more people have not indulged in it.

Evergreen material should be gathered only from places where, because of its abundance, it will not mar the beauty of its location.

Hemlock, white pine, juniper, and ink berry have all been suggested as gratifying evergreens for wreath-making.

Around a foundation of 14 gauge iron wire (coiled several times for firmness), with a diameter suiting the taste of individuals, the most satisfactory wreaths may be constructed.

After clipping the evergreens into six and eight-inch sections (having discarded the woody portions), fasten them, preferably with florists' wrapping wire, to the prepared foundation hoop. Add two sprays to every inch of the hoop, on one or both sides, as preferred. In some cases it will be necessary to add six or seven sprays of the evergreen to each inch, as in the case of hemlock. When the last spray has been bound, the starting ends should be secured with several wrappings of wire.

With the final knot tied, the wreath, if it has shaggy ends or protruding portions, may well be trimmed with pruning shears.

Bayberries added to a wreath blend happily with the green of evergreen materials. And cones, very small ones, opened up, make wreaths come to life. (To open cones, simply place them on top of a radiator or stove for half an hour.) Pine wreaths with red ribbons are lovely!

A finished wreath should have a stately appearance; well designed, well wrought.

Prize Winners For 1935

On November 26, at Graduation exercises, Melville G. Gray, vice-president of the board of trustees, presented the following awards:

The R. S. Bauer Awards for Excellence in Agricultural Projects:

First, Gilbert Wallace, Haverhill, \$15.00.

Second, Victor Pohju, Peabody, \$10.00.

Third, Leo Leonard, Lynn, \$10.00.

Fourth, Theodore Smolak, N. Andover, \$5.00. Fifth, Fred Scribner, Topsfield, \$5.00. Sixth, Gilbert Freeman, Beverly, \$5.00.

The Mrs. R. S. Bauer Awards for Excellence in Homemaking Projects: First, Dorothy Thorn, Saugus, \$20.00. Second, Freda Peterson, Newbury, \$10.00.

Third, Louise Semple, Gloucester, \$5.00.

Fourth, Genevieve Pasquale, Lynn, \$5.00.

Fifth, Margery Steeves, Saugus, \$5.00.

Sixth, Elhora Covell, Lynn, \$5.00.

Alumni Association Awards for Greatest Improvement in Academic Work:

Homemaking, Dorothy Thorn, Saugus, \$5.00.

Agricultural, Arthur Walsh, Danvers, \$5.00.

Abraham Krasker Medals for Excellence in English:

Homemaking, Dorothy Thorn, Saugus. Agricultural, Ruth Fairweather, Andover.

Balfour Plaque for Scholarship, Loyalty, and Achievement:

Homemaking, Genevieve Pasquale, Lynn.

Agricultural, Ernest Thayer, Jr., Lynn

Following are the committees who judged the prize-winners:

The Mrs. R. S. Bauer Awards: Mrs. E. K. Hayden, Saugus; Mrs. G. E. Hodson, West Gloucester; Mrs. J. A. Pitman, Salem.

The R. S. Bauer Awards: Mr. William Carlton, Danvers; Mr. Archer Pierce, Peabody; Mr. Conrad Trone-rud, Topsfield.

Because of the unusually dry fall, specialists at Massachusetts State College advise gardeners to use the hose liberally on evergreens and on newly transplanted shrubs to avoid winter killing and injury.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION
SUBSCRIPTION 25c PER YEAR

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

Entered as second-class matter, May 23, 1919, at the post office at Hathorne, Mass., under the Act of August 24, 1912.

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Secretary, Frank H. Coville	North Andover
Essex County Milk Goat Breeders' Association	
President, Ralph W. Burnham	Ipswich
Secretary, R. H. Campbell	Topsfield
Treasurer, Mrs. Charles Thomas	Essex

Calendar

December 2—Economics Group Discussion, Essex County Agricultural School, 8 P. M.

December 2—Meeting of Essex County Goat Breeders' Association, at this School, 8 P. M.

December 10—Essex County Poultry Association at the Methodist Church, Haverhill, 8 P. M.

December 11—Essex County Rabbit Breeders' Association, at this School, 8 P. M. Speaker, Charles Kellogg of the United States Department of Agriculture.

Now is the time to pick out the best laying hens and mark them for the breeding pens next spring, say poultry specialists at Massachusetts State College. A rough, worn coat at this time of year is one sign of a persistent layer.

Next time you bake, try cranberry-raisin pie. The tartness of the cranberries blends well with the sweetness of the raisins.

Alumni Notes

William Costley, class of 1932, has been appointed instructor of horticultural and landscape gardening courses for adult education under the Works Progress Administration in Lynn. Classes are open to the public.

Earle Ellis, '35, and Henry Cooper, '35, have engaged in a partnership poultry enterprise in Lynn.

Irene Burbeck, class of 1935, has been elected President of the Freshman class and Vice President of the Athletic Association at Nason College, Springvale, Maine.

Charles Vratots, class of 1921, has written with the information that he is enrolled at Columbia University where he is studying Agronomy twice weekly. He is living in Jersey City and is employed there at La Petite Shoppe, 644 Montgomery St.

Ruth Poirier, class of 1935, is employed by a costume house in Haverhill.

Josephine McDermott, '35, is employed at the Essex County Tuberculosis Sanatorium in Middleton.

Jack Sturtevant, class of 1930, is captain of the Massachusetts State College football squad. He is also a member of the student senate.

The School commends Arthur Kochakian, class of 1925, for his work on the municipal gardens in Haverhill.

Kathryn Ingoldsby, class of 1932, is teaching special classes in foods at the Bowditch School in Salem.

Clarence Tibbetts, '27, Parker Ryan, '24, Thomas Snelson, '30, and Henry Ellis, '27, are employed at the United Farmers' Milk Plant in Cambridge.

Claire Callahan, class of 1935, is assisting in the cafeteria at the Danvers State Hospital.

Mary McCarthy, '35, of Salem, is working on a WPA clothing project.

Miss Marion Bell was married on September 13 to Mr. John Crawford, Jr. Mr. and Mrs. Crawford are residing at 157 Bailey St., Lawrence.

Leo Leonard, class of 1935, is employed on the estate of Philip Horton Smith in Wenham.

Evan Roberts, '24, is employed on the Randolph Tucker estate in Wenham.

John Runnells, a former student, is managing a greenhouse in Lynn.

Donald Cooper, class of 1934, is employed at Horack's greenhouses, Lynn.

The paper white narcissus is the easiest of all bulbs to force in the house. New narcissus bulbs planted every two weeks will provide a succession of blooms from Christmas to Easter.

Ten per cent of the world's agricultural crop is consumer by insect pests, authorities estimate.

It is claimed that the United States uses more wood for toothpicks than for Christmas trees.

Twentieth Annual Graduation Exercises

At the twentieth annual graduation exercises of this School, ninety students in the agricultural and homemaking departments received diplomas and certificates.

The Reverend Clark T. Brownell of Haverhill addressed the graduating class.

Ernest Thayer, Jr., of Lynn and Dorothy Thorn, of Saugus, spoke on agricultural and homemaking subjects.

Following is a list of the candidates for graduation:

Agricultural department (diplomas): Robert Haskell, Vincent Nelson, Salem; Joseph Andreas, Leonard Briody, Charles Standley, Beverly; Howard Champion, Allan Morse, Rene Deloge, Adam Tatarunski, North Andover; Henry Cooper, John Donohue, Earle Ellis, Philip Hamson, Huntington Howard, Leo Leonard, Daniel MacLean, Joseph Spakas, Ernest Thayer, Lynn; Frank Corbin, Newburyport; Edmund Crossley, Ruth Fairweather, John Munroe, John Peatman, Leo Poisson, James Reilly, Francis Sparks, Andover; William Daly, Clarence Patterson, Victor Pohju, Peabody; Franklin Day, James Gardella, Forrest Haynes, George Nelson, Gilbert Wallace, Haverhill; Ralph Demuth, Melrose; Nicholas Fiore, Roy Johansen, Swampscott; Lawrence McDermott, John Toomey, Arthur Walsh, Danvers. (Certificate): Bayard Winter, Winthrop.

Homemaking department (Diplomas): Dorothy Blake, Dorothy Bruce, Barbara Hamilton, Ruth Hull, Agnes Hunnewell, Margery Steeves, Dorothy Thorn, Saugus; Helen Brinley, W. Newbury; Elizabeth Cole, Buxford; Blanche Gagne, Methuen; Muriel Hoelzel, Middleton; Dorothy Lowe, Lawrence; Roberta Thompson, Genevieve Pasquale, Lynn. (Certificates): Dorothy Abbott, Marjorie Hirst, Lillian Jackson, Methuen; Elsa Axelsson, Florence Hoyt, Phyllis Hoyt, Josephine McDermott, Dorothy Woodman, Danvers; Harriet Bruce, Hazel Ogen, Newburyport; Phyllis Zerbe, Andover; Ruth Caddo, Haverhill; Claire Callahan, Clare Fitzsimmons, Mildred Wirth, Lawrence; Elnora Covell, Pauline Morrissy, Anna Scanlon, Mildred Snow, Lynn; Carolyn Davis, Gloucester; Margaret Foss, Essex; Ruth Fossa, Edith Jones, Marjorie Kneeland, Mary McCarthy, Loretta O'Connor, Marguerite Sexton, Salem; Priscilla Holt, Ellen Murphy, Patience Kruschwitz, North Andover; R. Deborah Knowlton, Virginia Sweet, Beverly; Ruth Poirier, Groveland; Ruth Wheeler, Marblehead. (Special Certificate): Irene Burbeck, Salem.

Proper lighting of the poultry house brings greater egg production in fall and winter when prices are highest, say poultry specialists at Massachusetts State College.

New Federal Land Bank Loans

The Springfield Land Bank announces that new loan rates up to next July first will be $3\frac{1}{2}$ per cent and after that date 4%. Such loans usually run 20 to 33 years. Farmers who obtain loans now at these rates will never have to pay over the 4%.

The proceeds on such loans are paid to the borrower now in cash instead of bonds. Loans are now made on farm real estate up to 75 per cent total value. Such loans are usually secured by a first mortgage by the Land Bank and a second mortgage by the Land Commissioners. The interest rate on the latter is 5%.

Prices

Dr. George F. Warren, in the book entitled "Prices", states: "Neither the production of any one commodity nor the production of all commodities can be relied on to show the most important price movements. Attempts to control the general price level through production are evidently doomed to failure. If the price of one commodity is out of line with all other commodities, it may be brought into line by changing its production but when the whole price level falls, this method can not be followed."

The potato price index in September, 1935, was sixty-two per cent of the five-year average, or parity price. It may be brought into line by production control.

F. C. Smith

Organized Cooperation

The next regular meeting of the Economics Class which is being held by the Essex County Extension Service at this School will be held Monday evening, December 2 at eight o'clock in the main building. The subject for discussion will be "Can Organized Cooperation Solve the Rural Marketing Problem?"

This question is uppermost in the minds of leaders of agriculture today. Must the National Department of Agriculture try to enforce a production control program or can the co-operation of the United States solve the difficulty without any governmental interference?

Any farmers interested should attend this meeting and add their views to the discussion.

Henry Richardson, class of 1934, is employed by M. J. Caplan, wholesale grocer, in Lawrence.

Mollie Phippen, of Salem, class of 1934, is knitting instructor at 1 Hale St., Beverly.

The engagement has been announced of Miss Julia Bruce, class of 1932, to Mr. John Parker of Lynn. The marriage will take place in January.

Rabbit Breeders

The Essex County Rabbit Breeders' Association has long been anticipating a speaker from the United States Department of Agriculture. Wednesday, December 11, is the date finally chosen. At that time Charles E. Kellogg, acting chief of the Fur Division, Bureau of Biological Survey, U. S. D. A., will speak to rabbit breeders at the Essex County Agricultural School. He will discuss the work, and its results, of the Experiment Station located in California, the only rabbit experiment station in the United States.

All rabbit breeders of Essex County and of the State as a whole are invited to attend this meeting. There will be no admission charge.

Loans For Part-Time Farmers

Another change has been made whereby loans are now available on a basis of agricultural and also residential value. This is of great importance in Essex County where in so many cases farmers could not qualify for a Land Bank loan because of restrictions on the amount that could be loaned only on Agricultural value.

Loans to purchase farms are now available provided the prospective purchaser has 25% to pay down. Anyone interested should contact the County Agricultural Agent or the nearest Farm Loan Association.

F. C. Smith

PRIZE WINNERS

(Continued from page 1)

lins, Danvers; second, Kenneth White, Salem; third, Arthur Pentilla, Peabody.

Unclassified (with remote Agricultural Relationship): first, Philip Coles, Nahant; second, Rosario Richards, Salem; third, Alerson Noyes, Boxford.

Observational Records: first, John Marshall, Danvers; second, James Keane, Nahant; third, Walter Hichens, Middleton.

Outstanding Hobby (No awards for this class): Amateur Radio Station: Fielding Rogers, Danvers.

Class Awards

Senior Class Exhibits: first, Ernest Tarbox; second, Lawrence Shanks; third, Albert Collins.

Junior Class Exhibits: first, Anthony Dichirico; second, James Cashman; third, Rosario Richards.

Sophomore Class Exhibits: first, Walter Tataronis; second, John Marshall; third, Myron Eastwood.

Freshmen Class Exhibits: first, William Corning; second, Donald Kelley; third, Paul Kelley.

The sweepstakes honors were awarded to Charles Pettengill for his exhibit entitled, Maintaining Beauty on the Home Grounds by Adequate Insect and Disease Control.

A New Dairy Cattle Feed

The search for more economical feed for dairy cows continues and always will so long as good farmers realize that a dollar saved on the feed bill is just as profitable as a dollar more on the milk check.

A direct result of this search was the investigation of the better grades of tankage as the source of protein in dairy rations.

Experiments have recently been completed at the Massachusetts State College that furnish much valuable information to the progressive farmer. Certain results of the experiment merit your consideration if you are feeding for milk production.

The first question raised when tankage is mentioned is: "Will the cows eat it?" In reply, it is being fed successfully as the main source of protein in dairy rations. One ration used in a recent experiment contained 17% of high quality, 60% tankage. This fact settles the biggest question.

In the experiments at the Massachusetts State College, accurate weight records were kept to determine if the cows did better on the tankage or the non-tankage ration. A slight advantage was found in favor of the tankage ration, but the difference was not considered significant. So far as the eye could determine, the cows showed no difference when on or off the ration.

Another prime consideration is milk production, and here again the tankage showed a slight, yet insignificant advantage. Likewise, the composition of the milk and its flavor showed no significant difference.

Therefore, it should be realized that tankage as a source of protein in dairy rations may be fed without difficulty, that such a ration will not affect the cows appreciably in weight, looks, milk production, milk composition or flavor. But the use of tankage in the ration will greatly reduce the feed bill. If you desire more complete information it may be found in the Massachusetts Experiment Station Bulletin No. 321, obtainable from the Massachusetts Experiment Station, Amherst.

R. H. Granger,
Apprentice Instructor

Football

For the benefit of those who have been unable to attend the School games this year, the scores are herewith printed:

Wentworth 0-8; North Quincy 19-0; Peabody 25-0; Concord 21-7; Stoneham 0-0; Stockbridge 0-0.

Russell Knight, class of 1921, is employed by the William Pease O'Brien Company, realtors, in Boston.

Walter Moore, class of 1923, is a real estate operator in Weymouth.

Gathering Christmas Greens

Use for your slogan, "At Merry Christmas let no woodland suffer devastation by your hand."

This slogan has a wealth of meaning. The use of Christmas greens is universal, and they have been so wastefully gathered that many sources of supply are gone. Holly, laurel (in some sections), and ground pine are becoming scarce.

To insure a supply of Christmas greens for the future, they should be gathered thoughtfully. The use of substitutes is recommended strongly. Substitute evergreens are obtainable from forest thinning, and usually commercial discards may be had for the asking. By keeping one's eyes and ears open, many opportunities are presented.

What are some of these substitutes and how should they be obtained? In many pastures there are quantities of

blue-berried ground juniper which are spoiling the land for pasture purposes. Usually this material can be had for the asking. With a pair of pruning shears, cut the branches as desired and fit them in with other branches of pine and hemlock to make your wreaths. Pruning allows you to select the best branches and at the same time allows other branches to develop for another year. The berries add much to the appearance of the wreath, and you go away knowing that you have not despoiled the woodland for someone else.

Sometimes you may find a gravel bank which is being used, causing

pines

to totter and fall. Many logging operators permit the gathering of pine and hemlock boughs for use in preparation of wreaths and rope. Also, pine and hemlock are being pruned today so as to produce better lumber. The woodland owner who prunes his pine and hemlock properly not only provides himself with a wealth of material for Christmas greens, but he also increases the value of his growing timber.

Yew and Ground hemlock are materials that can be used extensively. Cut them with shears. Never break off limbs as this allows decay to enter. Pruning permits nature to heal her wounds and also causes a thickening of foliage by stimulating new growth.

Hemlock is good only for outdoor wreaths because it sheds its needles so quickly. Small branches can be pruned from large trees where the lower limbs hang to the ground. If friends are kind enough to allow you to gather hemlock on their land, be sure to prune the limbs close to the trunk. In gathering cones, do not break branches, but rather cut them with shears. Select branches from places which leave no bare spot in the tree.

Constructive Recreation

An entirely new project has been introduced into Essex County through the State cooperative extension work. Late in October a series of meetings of a recreation nature was announced. At the first meeting, eighty-five enthusiastic leaders representing WPA workers, club organizers, and occupational therapists, had gathered to receive instruction from Miss Ruth McIntire, recreational specialist, of the Massachusetts State College.

Dividing this assembly into smaller groups, Miss McIntire has devoted her attention to the definite needs of specific groups. The course includes play-production, dramatic stunts, games and social recreation. Shadow pictures enacted to music proved to be great fun.

Suggestions for family games were anagrams, checkers, chess, and a game called Whirr. The object of this latter is to list as many words as possible beginning with w and ending in r. There should be a time limit of course.

Charades and puppet shows were suggested for social recreation. Games to test one's knowledge of geography and history are being revived. Matching the names in the two lists following, will test your geographical rating:

- | | |
|------------------|-----------------|
| 1. Bay | 1. Panama |
| 2. Lake | 2. Potomac |
| 3. River | 3. Puget |
| 4. Mountain | 4. Chesapeake |
| 5. Isthmus | 5. Huron |
| 6. Sound | 6. Pike's Peak |
| 7. Cape | 7. Black |
| 8. State Capitol | 8. Florida |
| 9. Peninsula | 9. Bunker |
| 10. Sea | 10. Tallahassee |
| 11. Hill | 11. Cod |

Round About The County

Clothing classes have been formed rapidly in the county under the supervision of Mrs. Mary M. McIntire, Home Demonstration Agent. On Mondays, at the Essex County Tuberculosis Sanatorium, groups are working on cotton dresses. Thursdays are devoted to garment finishes.

On Tuesdays, cotton dresses are being made by classes in Haverhill, and on Fridays classes are meeting at the Essex County Agricultural School.

Classes in home nursing, an ever-popular course, are being held under the supervision of Mrs. Mary E. Roundy, R. N., a member of the staff of the Homemaking School. Two groups have been meeting in Salem at the Nurses' Home and the Horace Mann School. In addition, classes have been held in Rockport and South Groveland. The home nursing project will be concluded in these cities and towns December first.

A. M. Davis, horticultural specialist, will conclude a series of Essex County lectures on December 10.

Holiday Cake

Without a fruit cake ready to serve its many purposes, the heart of the winter holidays would be missing and the zest of the days might lose its spice. The joyful anticipation of Christmas brings a warm remembrance of pounds of tasty dried fruits, savory spices and rich nuts. There are nearly enough recipes for fruit cakes for Scheherazade to have served the Sultan with a different kind on each of the thousand and one nights. Some are simple and some are complicated concoctions, but one value lies in the fact that the true fruitcake keeps for a long, long time and may be kept in reserve for unexpected guests, or, if daintily wrapped in holiday ribbons, may make a most acceptable gift.

The following recipe is for a real old English fruitcake, rich in fruit and spices, and one which will keep the whole year through if it is made in large quantities.

English Fruit Cake

- | | |
|---|----------------|
| 1 cup shortening (part butter) | |
| 1 cup sugar | 4 eggs |
| 1-2 cup dark molasses | 2 cups flour |
| 1 teaspoon baking powder | |
| 1-2 teaspoon salt | |
| 1 teaspoon each of mace, nutmeg, ginger, clove | |
| 1 lb. seeded raisins | 1 lb. currants |
| 2 cups candied orange and lemon peels, citron, and candied cherries | |
| 2 cups chopped nuts | |

Cream shortening and sugar thoroughly. Break in eggs one at a time and beat after each addition. Stir in molasses. Sift together flour, baking powder and spices and mix them thoroughly with dried fruits and nuts. Add to first mixture and mix well.

Pack into greased tins which have been lined with waxed paper. Cover tops with waxed paper and tie on. Steam for three hours. Remove paper from top and bake two hours in oven at 275 or 300°F. Remove from pans, cool, wrap and store. This recipe makes between five and six pounds of cake.

Extension Workers Attend Conference

Mrs. Mary M. McIntire, Home Demonstration Agent, F. C. Smith, County Agricultural Agent, and H. J. Shute, 4-H Club Agent, attended the annual extension workers' conference at Amherst, November 25, 26, and 27.

Important Meeting of Goat Breeders at this School December 2, 8 P. M.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 16

HATHORNE, MASS., DECEMBER, 1935

NO. 11

Few Annuals For the Flower Garden

Real gardeners are about to commence their favorite indoor sport of browsing through the seed catalogs. The old collector's instinct—or is it an urge for new things for the flower garden — focuses attention on the novelty pages that enterprising seedsmen devise to lure the experimenting gardener into untravelled paths. Nor will gardeners be lacking the coming year for choice new annuals with which to embellish their beds and borders.

The most promising arrivals among annuals have been given a vote of approval by the All-American Council, of ten judges, after trial in widely diversified regions of the United States.

The Gold Medal award for 1936 goes to *Petunia Flaming Violet* from Holland, described as a "brilliant velvety blood-red or crimson." Few off-color flowers may be expected.

Cosmos Sensation Mixed gets an award or merit mainly for its huge size, four to six inches across.

Nasturtium Golden Globe rates high with the judges. Plants range from nine to twelve inches high, and flowers are sweet-scented and semi-double. It is a sport of the popular *Golden Gleam*, and also hails from Holland.

Petunia Dainty Lady is a single fringed variety of a delicate golden color, the culmination of ten years' selections by Rodger Seeds Ltd. of California.

Marigold Dixie Sunshine, originated in Atlanta, Georgia, offers the lover of these stately annuals another variety in the new line of which *Guinea Gold* and *Yellow Supreme* are its antecedents. *Dixie Sunshine* is described as presenting a dainty fringed *Chrysanthemum*-flowered effect.

Petunia Rose Gem is the last in this group receiving awards of merit, a dwarf compact grower with numerous small rose-pink flowers on eight-inch plants. This is a *Waller-Franklin* product from California.

Seed of these new annuals is available through the usual retail channels and not directly from the whole-

Facts Not Fancies

Essex Aggies feel pretty large-headed, according to Coach Couhig, about this season's games: three victories, one 14-14 tie, (with Keith Academy), two scoreless ties and two defeats by slim margins only.



Front Row: left to right, Capt. Norwood, lb; A. Trask, lt; G. Santin, rg; Lydon, c; Clinch, lg; Mavros, rt; Collins, rt; MacAloney, re.

Middle row: Coach Couhig; Diehirico, lhb; Eastwood, lg; Sano, fb; Gasper, fb; E. Santin, lhb; K. White, rlb; Fay, qb.

Back row: Fullington, fb; Mansfield, e; Long, t; Perkins, e; Farmer, e; Gourley, t; N. White, hb; Glackin, fb; Cashman, Asst. Mgr.; W. Walker, Mgr.

The scoreless ties were played with Stoneham and Stockbridge; the defeats, Essex 6, Lynn Classical Seconds 7; Essex Seconds 7, Peabody Seconds 13.

At the game with Peabody Seconds, Essex Aggies' first team scored four touchdowns and two kick goals making the final score 26-0.

At North Quincy, Essex made touchdowns in the first, second and fourth periods, scoring 18-0.

The third victory, 21-7, was scored at Concord.

Coach Philip H. Couhig states that the team's ground-gaining ability, its forward passes, and defense against running plays justified the team's pride in itself!

sale seed growers mentioned as the originators.

H. Linwood White,
Instructor in Floriculture

Corn-Hog Program Announced

The County Agent announces, through Washington, that the 1936-1937 corn-hog program, effective as of December 1, 1935, requires that the signer produce in 1936 at least

50 percent and not more than 100 percent of his market hog base if he is to receive the maximum hog adjustment payment. The maximum rate of benefit payments for 1936 will be \$1.25 per hog in the market base.

Corn payments in 1936 will be in two installments, payable in August and

December. The rate will be thirty-five cents per bushel, times the appraised yield, times the adjusted corn acreage. The 1937 rate per bushel is to be not less than thirty cents and is to be announced by November 30, 1936.

For more detailed information inquiries may be directed to F. C. Smith, County Agricultural Agent, Hathorne.

Extension Department Helps With Resettlement

Write to, or visit the County Agricultural Agent, F. C. Smith, at this School, for information concerning loans and other services placed at the disposal of farmers through the Resettlement Administration.

Working in close cooperation with the Agricultural Extension Service, the Resettlement Administration workers sit down with the farmer applying for a loan and together they prepare a farm management plan which, if followed, should eventually put him on his own feet and enable him to repay his loan in a few years.

Farmers whose tools and equipment have been lost when their buildings were struck by lightning have been helped through the Administration when they had no sources of credit for the purchase of capital goods to make a fresh start.

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Secretary, R. H. Campbell, Topsfield
Treasurer, Mrs. Charles Thomas, Essex

Calendar

December 28—Boston Market Gardeners' Meeting at this School. 10 A. M. A squash contest will replace the usual carrot contest.

December 29 through January 3—Boston Poultry Show.

January 2—Reopening of School after the Christmas holidays.

January 8-9-10—Union Agricultural Meeting at Worcester.

January 9—Child Guidance lecture in Gloucester. Mrs. Ruth D. Morley, Extension specialist, speaker 7.30 P. M. See page 4 for details.

January 10—Child Guidance lectures by Mrs. Morley at this School, 2.30 P. M. and at the home of Mrs. Albert Bradstreet, 11 Bridge St., E. Danvers, 7.30 P. M.

March 18—Farmers' and Homemakers' Day at this School.

New Year's Greetings

The board of editors extends to its readers the wish that their New Year be prosperous and happy.

Honor Roll

The following students in the agricultural department attained scholastic achievement during the first term. For this, their names have been placed on the honor roll:

Seniors: Lewis Norwood, Rockport; Vincent O'Donnell, Edward Bessom, Lynn; Charles Pettingill, Haverhill; Charles Clinch, Swampscott; Lawrence Shanks, Essex; D. Woodward Walker, Salem; Norman Wood, Amesbury; Mildred Hills, Byfield; Elmer Aldrich, Beverly; Albert Collins, Danvers.

Juniors: Walter Alley, Merle Grafam, James O'Neill, George Tucker, Lynn; Walter Hichens, James Webber, Middleton; Gildo Santin, Gilbert Freeman, Paul St. Linger, Warren Towne, Beverly; Henry Smolak, Theodore Smolak, N. Andover; Francis Gillen, Augustine Sheehy, Lawrence; Melville Low, Saugus; Clayton Teague, Marblehead; David Ellwell, Essex; Joseph Lydon, James Keane, Nahant; Archie Nimmo, Methuen; Joseph Blunda, Ipswich; Sargent Griffen, Gloucester.

Sophomores: John Marshall, Danvers; John Munroe, Walter Tataronis, Salem; Albert Batchelder, Andover.

2X-Y-Z: John Natti, Joseph Arnold, Henry Alto, Gloucester; Clifford Nelson, Donald Nelson, Walter Winn, Carl Schwarzenburg, Methuen; John Kukene, Amesbury; Rhea Goselin, Haverhill; Sidney Johnston, Gary Sano, Lynn; Leroy MacAloney, Groveland; Leavill Moulton, Ernest Santin, Howard Wilson, Robert Corneliusen, Edward Cook, Beverly; Paul Parker, Topsfield; Percy Curtis, Joseph Ranta, Rockport; Frank Stacey, Marblehead; Wilfred Desmarais, Danvers; Alger Marshall, Essex; Allyn Trask, Peabody; Norman Everett, Thomas Margerison, Lawrence.

Freshmen: William Corning, Arthur Walker, Beverly; Paul Kelley, Lynn; Conrad Nollett, Andover; Nicholas DiLiso, John Hector, Peabody; Robert Craven, Howard Stone, Methuen; Charles True, Salisbury.

Basketball Schedule

1935-1936

Stanley Bickford of Lynnfield, (center), Lewis Norwood, Rockport, (forward), Gildo Santin, Beverly, (guard), Percy Curtis, Rockport, (forward), and Jacob Ranta of Rockport, (guard), started off the opening game with Wakefield on December 20.

The remaining schedule is as follows:

December 21—at Gloucester
January 3—open
January 8—open
January 10—Alumni here
January 14 at Haverhill Trade
January 17—open
January 22—at St. Joseph's Junior
ate

News of the School At a Glance

Christmas packages of candy, made in the foods department of the Home-making School, have been distributed among children's homes, Junior Red Cross Organizations, and hospitals in Essex County. Gift boxes were made by students in the art department.

Students in Mrs. Roundy's Child Care classes have been constructing toys for Christmas distribution among charitable organizations in Essex County.

December 10

Peer Johnson, Jr., a freshman student, traced, at a morning assembly, the flight to the Orient of Colonel and Mrs. Lindbergh as related by Anne Lindbergh in her latest book.

December 17

The Sophomore floriculture class visited the conservatory at the Ropes Memorial home and Wm. T. Walke and Sons' greenhouses in Salem.

January 9

On this date G. A. Meigs, instructor in beekeeping, will preside at the annual business meeting of the Massachusetts Federation of Beekeepers, held in conjunction with the Union Agricultural Meeting in Worcester.

Apple Annie Says:

Teach some folks that our apples are stylish—they'll eat them regardless of health.

Teach some folks that our apples are healthful—they'll eat them regardless of style.

Teach some folks how good our apples can be—they'll eat them anyhow. Apple Institute, Inc.

January 24—at Bristol
January 29—at Keith Academy
February 1—at Boston Boys' Club, 15 Green St., Charlestown
February 5—open
February 7—at Stockbridge
February 14—Haverhill Trade—here
February 21—at Melrose
February 26—open
February 28—Bristol—here
March 4—open
March 6—at Keith Academy

It is possible that dances will be held after the Alumni, Haverhill Trade and Bristol games held here.

Following are the remaining members of the teams:

Howard Wilson, Beverly, c; Gary Sano, Lynn, g; Norbert White, Lynn, f; Kenneth White, Salem, f; Charles Clinch, Middleton, g; James Goodale, Middleton, c; James Cashman, Peabody, g; Arthur Glackin, Peabody, g; John Munroe, Salem, g; Walter Tataronis, Salem, c; Philip Coles, Nahant, f; Robert Farmer, Lynn, g.

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

DECEMBER, 1935

STUDENT EDITORS

Homemaking Department

Helen Chase, Newburyport
High School Special
Florence Hirst, Methuen Senior
Josephine Hogan, Swampscott Senior
Ruth Riley, Lawrence
High School Special

Agricultural Department

Leonard Duratti, Swampscott

INTERCLASS BASKETBALL

Agricultural Department

SENIORS (41)			SOPHS (11)		
	Pts.			Pts.	
K. White	rf 4	Munroe	rf 1		
Glackin	lf 4	Beal	lf 2		
Norwood	c 14	Rogers	c 0		
Clinch	rg 3	Coles	rg 1		
Bickford	lg 16	Sano	lg 5		
Farmer	lg 0	Farmer	lf 2		
		Ranta	lg 0		
	41		11		

JUNIORS (26)			SPECIALS (22)		
	Pts.			Pts.	
St. Linger	rf 6	Curtis	rf 12		
G. Santin	lf 2	Sano	lf 3		
Low	c 0	Wilson	c 4		
N. White	rg 10	Ranta	rg 1		
Cashman	lg 8	Fay	lg 2		
Dichirico	c 0				
	26		22		

SENIORS (31)			JUNIORS (12)		
	Pts.			Pts.	
Norwood	rf 21	Cashman	rf 4		
K. White	lf 3	Gasper	lf 2		
Bickford	c 0	St. Linger	c 2		
Glackin	rg 0	G. Santin	rg 4		
Clinch	lg 4	N. White	lg 0		
Goodale	lg 1				
Farmer	c 0				
	31		12		

SENIORS (24)			SPECIALS (13)		
	Pts.			Pts.	
Norwood	rf 20	Curtis	rf 8		
Pettingill	lf 0	Wilson	lf 2		
Clinch	c 4	MacAloney	c 0		
Glackin	rg 0	Ranta	rg 0		
Goodale	lg 0	Sano	lg 3		
Farmer	rg 0				
	24		13		

LD

SCHOOL MUSICIANS

Increased volume is expected from this year's School orchestra which numbers sixteen: Lemyra Briggs, violin; Albert Collins, trumpet; Paul Day, trombone; Beatrice Emerson, piano; Norman Everett, piano; Donald Gasper, trumpet; Walter Hichens, drums and taps; John Kukene, banjo; Beatrice Loveys, steel guitar; Joe Mattera, clarinet; Paul Parker, trumpet; Richard Paulsen, trombone; Priscilla Preston, violin; Olive Purdy, violin; Warren Towne, violin; John Wilcox, clarinet.

LD

CANDY RECIPES

The students in the upper classes have been using the following recipe for making fudge. This recipe may sound expensive but if you make it once you will surely agree that it's worth the trouble.

Sour Cream Fudge

2 squares chocolate
2/3 cup sour cream
2 cups sugar
1/8 teaspoon salt
1 teaspoon vanilla

Nuts and marshmallows as desired
Melt the chocolate in saucepan over hot water, add sugar, and when well blended, add sour cream slowly. Stir and bring slowly to a boil and boil without stirring to 234°F or until soft ball stage. Pour on a marble slab or platter, slightly moistened by having been wiped over with a piece of damp cheesecloth, and leave undisturbed until cool. Add vanilla and paddle until mixture is thick and creamy, then knead with hands until smooth. Roll out 1/4 inch thick or put into pan and cut.

Beginners find the Molasses Kiss recipe very satisfactory and the rest of us find it very tasty.

Velvet Molasses Kisses

1/2 cup molasses
1 1/2 tbsp. vinegar
1 1/2 cups sugar
1/4 tsp. cream of tartar
4 tbsp. butter
1/2 cup soda

1/2 cup of Karo may be used in place of cream of tartar and resulting kisses will keep better.

Put molasses, sugar, water and vinegar into saucepan or iron kettle. Stir until it boils and add cream of tartar. Boil to 250°F and remove from stove. Add butter and soda and cook to 256°F or until mixture becomes brittle when tried in cold water. Stir constantly during last part of cooking. Pour on slightly buttered marble slab or agate tray and when cool pull until light colored. While pulling flavor with one teaspoon vanilla or half a tsp. lemon extract, or a few drops of oil of peppermint or wintergreen. Cut into pieces with scissors and wrap in wax paper.

JH

NEW BOARD MEMBERS

Congratulations to those in charge of the November "Green and White." The articles submitted were well written and were favorably commented upon. The number of sales was very pleasing.

As is the custom, a new committee will serve on the March issue, and we are sure they will be very satisfactory. Let us introduce you to the Homemaking Board Members:

Assistant Editor, Phyllis Marks, Lynn; Echo Club, Helen Lucas, Peabody; Art, Stacia Grabowska, Danvers; Sports, Kay Johnson, Salem; Alumni, Florence Woodbury, Middleton; Humor, Elinor Senior, Byfield; Exchange, Ruth Peterson, Beverly; Business Managers, Amelia Tataronis, Salem, Henrietta Stockley, Peabody.

RR

FUTURE FARMERS OF AMERICA

In an informal discussion of the future of farming, Mr. Ralph Gaskill of the Essex County Co-operative Farming Association stressed the necessity of co-operation among farmers. Speaking at the meeting of the F. F. A. on December 10, Mr. Gaskill advised the members not to expect wealth from farming, but to be content that they are choosing an occupation that is pleasant, as well as challenging.

At the beginning of his address the speaker gave a brief history of cooperative buying among farmers. In pointing out the causes of failure of the first attempts at organization Mr. Gaskill stated that no organization can succeed without having a reasonable margin of profit to pay for clerks and losses due to damage and cancellation of defaults in payments.

The audience was keenly appreciative of the excellent advice which Mr. Gaskill gave so freely and is looking forward to his returning at a future meeting.

LD

ECHO CLUB ENTERTAINS

The Echo Club of the Homemaking Department were hostesses to the Agricultural department December 20, 1935, at an afternoon Christmas party. A playlet entitled "Such As We Can't Use" was presented under the direction of Miss Constance Lovett of the faculty.

The play provided many humorous situations. A group of middle-aged women were holding a club meeting at the home of Mrs. Cooner and while they were trying to decide what gifts each person would donate to the missionary box which was to be sent to China, a box arrived from that country with small gifts for them. Upon inspection it was found to be a motley array of things. After reading a note from their missionary they decided to send the treasure money to help one child through college.

The cast, all members of the Homemaking department, ably took their parts: Mrs. Howard Cooner, hostess to Ladies' Foreign Missionary Club, played by Olive Drew, Saugus; Miss Emma Peabody, nim and thrifty, Gertrude Lawton, Methuen; Mrs. Luther Jones, wife of town physician, Emily Currier; Miss Trixie Samples, Florence Hirst, Methuen; Mrs. Tom Culver, Agnes Burke, Methuen; Mrs. Susan Temple, Doris Cooke, Nahant; Miss Laura Conover, Louise Semple, Gloucester; Miss Hattie Trist, reporter, Josephine Hogan, Swampscott; Mrs. Tweedman Smith, Gertrude McAdoo, Saugus; Miss Hilda Brown, Claire Dooley, Salem; Grandmother Baker, Teresa Ellis, Essex; Sue Miller, maid, Thelma Alexander, Nahant.

Following the entertainment, refreshments were served and dancing enjoyed from 3:30 to 5:30 P. M.

FRH

4-H CLUB NOTES

1447 Club Members enrolled in
Essex County in 1935.

There were 15 towns carrying the 4-H Club message to its boys and girls during the club year of 1935, and 101 volunteer local leaders who gave their time to the boys and girls in order that they might benefit from the 4-H program. These volunteer local leaders led a total of 131 clubs in the following projects: clothing, 51 clubs; garden, 22 clubs; handicraft, 11 clubs; poultry, 11 clubs; food, 11 clubs; canning, 9 clubs; homecraft, 6 clubs; forestry, 6; Big Sister, 4.

It will be interesting to note that Beverly led the enrollment by towns having a total of 301 boys and girls doing 4-H Club work. Haverhill was next with 280. Then came Andover with 165, Saugus 144, Danvers 87, Essex 87, Groveland 72, Newbury (including Bvfield) 52, Winthron 40, Middleton 34, No. Andover 21, Tonsfield 20, Amesbury 17, Gloucester 16, W. Boxford 14.

There were 590 boys enrolled of which 469 or 79.5% completed the work of the project; while 857 girls carried on the work of the projects and 745 or 86.9% completed.

Some of the outstanding features of our club year were the dress contest and food contest for girls and handicraft contest for boys. Also including contests, trips, delegates to State and National Camp, Topsfield Fair and our annual 4-H Field Day.

In the county dress contest there were 60 contestants, ranging from the ages of 12 to 18. Each girl made a dress during the club year which was sent in to the county office and judged, then on a Saturday all the girls came in and joined in the county-wide dress review. There were many outstanding garments. School dresses were made by the younger girls, and nartv and street costumes were made by the older ones. We also had a class for Sunday best dress, sport costume and renovated garments.

The three highest scoring contestants entered the state contest in Amherst. Gertrude Shevenell of Groveland won in the party dress class. Jane Kessariss of Peverly was high in Sunday best class, while Marjorie Forbes of Andover had the most outstanding garment in the street costume.

We had a Food contest which was on the same basis. The winners had an opportunity to visit the State College.

Three judging teams were trained, two vegetable teams and one poultry. The vegetable team had many trips, the first being to Hartford where they participated in the National Vegetable Judging Contest, placing well up in the contest. Other contests that this team participated in were at Tonsfield, Brockton and the Interscholastic Contest at Mass. State College.

The Poultry Team judged at Boston Poultry Show, Topsfield, Brockton, and at the Interscholastic.

Our Field Day is always an inspiration to club workers both young and old. Over 500 club members were in attendance and enjoyed a day of fun.

CAMP

Twelve local leaders from this county attended the local leaders camp which was held in Amherst. Each year we send a delegation of leaders to this camp to receive new ideas for their clubs and special training in subject matter and

methods. This is one of the few things that we are able to do for our leaders.

STATE CAMP

Seven delegates representing the various major projects, a Service Club delegate, and three special delegates attended the State Camp in Amherst this year for outstanding work and leadership.

NATIONAL CAMP

Alfred Cipolla of Haverhill, a club member for 10 years, was one of the Massachusetts delegates to the National 4-H Camp in Washington. Each year Massachusetts sends two boys and two girls to the National Camp. Essex County sends one every three years. There was no other candidate so well qualified as Cipolla, having come up through the ranks of club work, a local leader and president of the County Service Club.

There were many other worthy articles of mention but space will not permit. But if it is success in life you want, get a 4-H Club background.

HORACE J. SHUTE,

County Club Agent

A CHALLENGE

When school opened last fall many of the girls inquired about the sports program for the year. A general meeting, conducted by Miss Moore, was held and each class was given a certain day to play basketball. The classes organized and for a few weeks all the girls greatly enthused. Then their interest began to lag—for no apparent reason. What is the cause of it?

Do you know how many girls there are at "Essex Aggie"? There are thirty-four Freshmen, thirty-two Juniors, and sixty-five Seniors. How many girls are required for a team in basketball, baseball, volley ball or field hockey? Six people form a basketball team; nine form a baseball team; eleven for field hockey and an unlimited number for volley ball.

According to the above figures the Freshmen could have a team for each sport, the Juniors also, and the Seniors could have two teams for each sport.

Why not try interclass games for the present? Interclass games would arouse more interest and keener competition than inter-scholastic games. The players would find increasing skill in the sports and if the time comes when we are challenged by other schools we shall be ready to take them on.

Many of our best players live at points in the county far from school and would not be able to play outside of school time. In order to play inter-scholastic games we should have to take girls who live near the school and they might not be the best players. Transportation is a problem factor.

Our time for practice is limited because we have to use the gymnasium when the boys are not playing. Our only time is at noon and there are so many other activities regular practice would often be interrupted. If the teams from the different classes practice by themselves every day and play no games the players will soon grow tired of the game and their enthusiasm will die out. By having interclass games the players would get practice and enthusiasm for sports would be aroused.

No sports—interscholastic games—interclass games—which? That is the challenge to you girls of "Essex Aggie."

HC HR

CONTEST PRIZES

For the fall issue of the "Green and White," the school magazine, a contest was held for the pupils of both the Agricultural and Homemaking Departments to compete for money prizes for the best written and most interesting short stories, non-fiction, poems and art contributions.

Great interest was shown and many fine stories, essays, editorials, poems and art contributions were presented to the editors of the magazine who later turned their selection over to the members of the faculty, the final judges.

In the Homemaking Department the prize winners for the best short stories were: Freda Peterson of Newbury, for "Slippery Hill;" Yola Scamperino of Lawrence, for "He Was A Hero." For non-fiction: Lena Tela of Lawrence, for "Thanksgiving, A Fantasy;" Ruth Dixon of Lawrence, for "On to Success." Poetry awards went to: Phyllis Thompson, Saugus, for "Snowfall;" Shirley Hagar, Wenham, for her poem entitled "Blue." Betty Hawkes and Phyllis Marks were awarded prizes for their Art contributions. Betty drew the design for our magazine cover which was very clever and appropriate with its Thanksgiving turkey, while both Betty and Phyllis get credit for some of the artistic headings introducing each department of the "Green and White."

Will more and larger money prizes be offered for contributions to our next "Green and White" ???

JH

ALUMNI NOTES

Emma Bourdelais, class of 1932, has promised to love, honor and obey Leslie Hatch and they are two-ing it at No. 3 Greenfield St., Lawrence.

Orchids to Marion Bell, class of '33, who was united in marriage to John Crawford on September 13, 1935. You will find the happy couple at 157 Bailey St., Lawrence.

Rumor hath it that Betty Cole, class of 1935, doffed her graduation gown to don the bridal trousseau on Thanksgiving Day when she took Walter Perkins for a life partner. Betty's Aggie training is being put to test at South Cross Road, Bradford.

Isabel Murray, class of '31, and Arthur Babcock are enjoying married life in Malden. The ceremony took place November 12, 1935.

Mary Grover, class of '34, is now Mrs. Anthony Cynus. November 10 is the date which Mr. Cynus must faithfully remember annually.

Veronica Marquis, class of '31, has completed her course at the St. John's Hospital in Lowell and has passed the State Board Examinations.

Mary Peterson, class of '34, is cheering patients at the Marlboro Hospital with her beautiful smile. Mary is a student nurse in the Household Nursing Association.

Peter Payson, class of '28, is manager of the United Dairy Retail Store, known locally as the Betty Alden Store, 304 Summer Ave., Springfield, Mass.

Palmer Perley, class of '27, recently visited the School and reported that he has profited by attending E. C. A. S.

LD

Chinese Cabbage Makes Its Bow

Although Chinese cabbage has been grown for some years its popularity has only recently become manifest. Grown by the gardening divisions of this School, and sold through the Future Farmers of America at their roadside stand, it has been learned that in the last year the use of this vegetable has increased a large per cent over former years.

The foods department recommends its use as a salad, cut into shreds and seasoned with oil and condiments. The lower, solid growth may be boiled and eaten as cabbage, the flavor being similar to that of cabbage, though milder.

The culture is not different from that of other members of the cabbage family to which it belongs. It requires a cool climate and should be sown outdoors about the first of July in rows fifteen to twenty-four inches apart. At the time when the plants are high enough to be thinned they should stand from twelve to fifteen inches apart in the row.

The variety recommended by C. M. Stearns, Instructor in Market Gardening, is that called "chihli".

Storage methods are the same as those for celery.

Fertilizer Facts

Of the 121 grades of mixed fertilizers sold in the New England States in the year ending June 30, 1934 the tonnage represented by the leading 10 grades was 76.38 per cent of the total. The leading grade, 5-8-7 accounted for 17.44 per cent of the total tonnage.

The average total available plant-food content of the mixed fertilizers sold in New England was 5.2 per cent nitrogen, 9.18 per cent phosphoric acid and 9.22 per cent potassium, a total of 23.52 per cent.

There has been a steady trend toward the use of fertilizers containing higher total plant food content. From 1880 to 1934 the percentage has risen from 13.4 to 18.1 per cent average for the United States.

The mean wholesale price of all fertilizer materials, excluding the organic ammoniates, is now only about one half of what it was in 1900, despite the increased costs of labor.

One of the best ways of saving on the cost of fertilizer delivered to the farm is by the use of these higher grades of fertilizer. For example, a saving of from 14 per cent to 26 per cent can be made by using an 8-16-8 grade instead of a 4-8-4 grade.

(Condensed from the "Fertilizer Review" by A. L. Dacy, Instructor in Vegetable Gardening.)

Of further interest was his recommendation of the one-day flush of 40 per cent milk in the control of coccidiosis. He did not feel that a

Poultry Feeding and Nutrition

An excellent talk was offered by Mr. R. A. Campbell of the Eastern States Farmers' Exchange on the above topic at the last meeting of the Essex County Poultry Association. He told how the surface had only been skimmed, and that careful research was continually throwing new light on vitamins, carbohydrates, fats, and the complex proteins.

A few years back, vitamins were not even recognized in poultry-feeding. Then A and D were casually mentioned. Today they are measured. Tomorrow the poultryman will be speaking familiarly of the number of blue units of vitamin A in various ingredients of the poultry ration. A great deal of emphasis is being placed at the present time in the advertising and literature relative to vitamin A which is concerned with promoting growth, disease resistance, and hatchability. It is commonly found in cod liver oil, sardine oil, yellow corn and alfalfa leaf meal. Birds possess in varying degrees the ability to store vitamin A in their livers, and Mr. Campbell feels that more than necessary emphasis is being put on vitamin A; that it is probably present in greater degree than actually required in rations containing the ingredients mentioned. He also spoke in some detail regarding other vitamin needs of poultry.

Of particular interest to poultrymen were his comments on protein levels. Experimental work has indicated that the level has been low for sustained and heavy production, and that a desirable point is somewhere between 15 and 16 per cent for total feed consumed.

Alumni Officers 1935-1936

At the annual business meeting of the School Alumni Association the following members were elected to hold office for the ensuing year:

President, Arthur Kochakian, '26, Haverhill; Vice-Presidents, Agricultural Department: Burleigh Odiorne, '26, Wilmington; Homemaking Department: Mrs. Marie Murray, '23, Lexington; Secretary - Treasurer: Horace J. Shute, '27, Hathorne; New member of Executive Committee: Mrs. Josephine Burt, '23, Danvers.

definite periodic feeding of the flush was required, but that it should be used when birds appeared to be slightly "off."

J. Stanley Bennett,
Instructor in Poultry

Apple Pomace

Are you one of the few farmers so located that he has access to a fall supply of apple pomace? If so, you might be well paid for an investigation of its feeding value.

Apple pomace is very closely comparable to corn silage in most respects. A chemical analysis shows no significant variation in constituents; and feeding trials likewise show little difference.

At the Agricultural School, we are feeding apple pomace with good results. At the present time, it is being fed in place of silage, with a maximum of 30 lbs. for a 1000 lb. cow. At experiment stations, however, pomace has been fed in even larger amounts with equally satisfactory results.

Apple pomace makes a good substitute for corn silage if the supply of the latter is short, and by comparison could be bought profitably at \$4.00 per ton to lengthen the feeding season.

Storing presents no problem as the pomace can be ensiled, or just piled up on the barn floor where it will keep with very little fermenting and with no harm to its feeding value.

It should be fed lightly at first until the cows become accustomed to it; then as high as 35 lbs. daily may be fed without harming the cow or depleting the pocketbook as it can be secured at a very low price.

R. H. Granger,
Apprentice Instructor

Library Notes

The following new books of non-fiction have been added to the School library since fall:

"North to the Orient", by Anne Lindbergh.

"The Red Knight of Germany", by Floyd Gibbons.

"Bring 'Em Back Alive", by Frank Buck.

"Vagabonding Down the Andes", by Harry Frank.

"Sunny Meadows", by Thomas Dreier.

"Beyond the New Deal", by David Lawrence.

"New Frontiers", by Henry Wallace, Secretary of Agriculture.

"Through Time and Space", by Sir James Jeans.

"Romance of Labrador", by Sir Wilfred Grenfell.

Fabre's "Book of Insects".

"On Yankee Hilltops", by Walter Eaton.

"The Flying Carpet", by Richard Halliburton.

The School wishes to acknowledge, with gratitude, Trustee Ralph S. Bauer's gift, "The History of Essex County."

Round About the County

For information concerning January classes in clothes renovation, Diamond finishes, and nutrition, please write to Mrs. Mary M. McIntire, Home Demonstration Agent, Hathorne.

Home Nursing

Home Nursing classes with Mrs. Mary E. Roundy will start on Monday, January 6 with a group at the Salem Nurses' Home, at 7.30 P. M. Information should be sought through the group chairman, Mrs. Oliver Pratt, Highland Avenue, Salem.

On Tuesday, January 7, a group under the chairmanship of Mrs. Mary E. Carruth, 14 Rose Ave., Marblehead, will meet at 2.30 at the Clifton Community House.

At 2.30 P. M. on January 9, Mrs. A. J. Hennessy, 22 Wisteria St., Salem, will lead the group which will meet at the Horace Mann School.

On the evening of January 10, at 7.30, Mrs. Roundy will hold a class at this School. Mrs. John Maloney, 23 Central Ave., Danvers, is the group chairman.

An afternoon meeting on the tenth will be held in South Peabody. The time is 2.30.

Child Guidance

Mrs. Ruth D. Morley, Extension Specialist of the Massachusetts State College, has granted Essex County three dates in January for child guidance classes.

The first class on Thursday, January 9, will be held in Gloucester at 7.30 P. M. Mrs. Lillian C. Works, 13A East Main St., is chairman of the Gloucester group.

A second group will meet on the afternoon of January 10 at the Essex County Agricultural School, at 2.30, with Mrs. John Maloney, 23 Central Ave., Danvers, chairman.

Mrs. Alvah Bradstreet of 11 Bridge St., East Danvers, is chairman of the third group. It is at her home that this group will meet at 7.30 P. M., January 10.

Call Off the Hounds

"Connoisseurs of their Harris tweed used to pick it up and take a good deep sniff to catch the delightful aroma that is a subtle field perfume and gets into the tweed from the peat-saturated air of the crofters' cottages. That was the infallible test. How could it have that nice flowery peat smell if it hadn't been created around a peat fire?

But no longer is the infallible test? The story is that some smart fellow concocted an essence of peat which can be sprayed on a mongrel Harris tweed. They are using it. In fact they are using it so efficiently and it is so good that the mock tweeds smell better than the real ones."

Two Beverly Girls Win 4-H Medals

Jane Kessar, 18, 93 Cabot St., and Inis Biondini, 19, of 141 Park Street, both of Beverly, were awarded medals by Miss Tena Bishop for their achievement in 4-H Club Work. Miss Kessar won the county honors in the general Home Economics Contest for which she received a fine gold medal. Jane has just finished her seventh year in 4-H Club work with a fine record of clothing, big sister, food and canning club work. At the present time she is assisting Miss Marion Parker as a junior leader in charge of a group of younger girls.

Inis Biondini, a clothing club girl for 8 years and a junior leader for 4 years was proclaimed the most outstanding clothing club girl in this county and received a similar award for her achievement.

Both of these girls come from large families and both have made exceptionally fine use of their knowledge and experiences as club members to help their families. And too they have used their "Heart H" by helping others. In a letter from one of the girls she said "I hope I will be able to stay in club work a good many more years and help others get as much out of it as I did".

During their years of club work these girls have entered many contests and each has been a winner in her class.

H. J. Shute

4-H Local Leaders Elect Officers

Mrs. Leon Jordan of Groveland was elected President of the 4-H Local Leaders Association for the years 1935-1936 at the November business meeting.

Following is a list of remaining officers:

Vice-President: Mrs. Florence Abbott, Andover; Secretary: Miss Harriet Smith, Newburyport; Treasurer: H. J. Shute, Hathorne; Assistant Treasurer: Mrs. Arthur Usher, Danvers; Executive Committee: Silas Little, Newbury; Miss Marion Parker, Beverly; Miss Dorothy Alger, Winthrop; Mr. Walter Blossom, Saugus; Mr. Lionel Lambert, Haverhill; Mrs. W. H. Cann, Danvers; Miss Clara Putnam, Andover; Mrs. Helen Myers, Beverly; Mrs. Henry Albrecht, North Andover.

The Essex County Milk Goat Breeders' Association have adopted a new bottle cap.

The spud gets its name from the Society of Prevention of Unwholesome Diet, an Old English Dietitian Society.

Agricultural Agent's Annual Report

The growing value of extension work in Essex County is indicated by a comparative report of the work accomplished in 1934 and '35, as follows:

	1934	1935
Total meetings	118	113
Total attendance	4449	3324
Office calls	647	794
Farm visits	499	653
Incoming telephone calls ..	518	420
Circular letters	80	90
(Distributed to)		26566
Bulletins distributed	2050	2089
Press articles	65	50
Individual letters	1202	1633

New Lights in Rabbit Field

Essex County Rabbit Breeders found particular value at their regular December meeting in the discussion by Charles Kellogg of the California Experiment Station when he stated that litters culled to seven, and weighing, on the average, three pounds at 56 days, produce as much meat and by-products of good quality as litters which may be larger and of phenomenal individual weight.

Mr. Kellogg's discussion revealed that at the Experiment Station the question has arisen whether a doe should be allowed to suckle her young through the eight weeks or whether she should be bred back after the seventh week and the young weaned.

It has been shown that the rate of gain per week, in the young, reaches a peak at the fifth and sixth weeks, dropping off in the seventh and eighth. This is only one of the many experiments being carried on which takes into consideration the condition of both the does and her young.

Organized Rabbit Shows

At a meeting of the Essex County Rabbit Breeders' Association held this month, Herman Jung of Peabody was appointed to represent the Association on December 29 when rabbit breeders will discuss at Mechanics Hall, Boston, the possible functions of a Massachusetts show circuit. Dates for rabbit shows throughout the state will be determined.

Large open pine cones filled with melted suet, thickened with cracked corn and sunflower seed, make choice morsels for bird feeding stations.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 16

HATHORNE, MASS., JANUARY, 1936

NO. 12

Harold Rogers

Harold Bernard Rogers of Spring Hill Farm, Haverhill, was awarded on January 9 the highest honor presented yearly by the Massachusetts Department of Agriculture to a candidate who, having graduated under the vocational agricultural education courses, and having demonstrated his ability through a series of years, has proved to be a young master farmer. For what is termed as "Creditable Accomplishment" Mr. Rogers was awarded a certificate at the Union Agricultural Meetings held this month in Worcester.

It is a most certainly a credit to Mr. Rogers that seven years after graduating from this School he is now operating a farm business which commands the attention of leading farmers in this section of the State.

It is creditable that at the age of twenty-seven he now specializes in market gardening, fruits and dairying, makes daily market trips to Haverhill stores and three trips a week to the Boston Regional Market.

Added to this, there is credit due for the enlargement and improvement of Spring Hill Farm. Originally a farm of twenty cultivated acres, it has been increased through purchase, leases and rentals to sixty acres under plow. Thirty-five acres are devoted to the principal vegetable crops. The remainder is in orchard, small fruits, grass and clover. Renovation has added a milk room, a garage and vegetable storage, and a silo of seventy tons capacity.

It is a creditable accomplishment that Harold Rogers has built up an accredited dairy herd, set out an orchard of McIntosh and Baldwin apple trees, established a small fruit plantation, and made a specialty of raising many tons of Blue Hubbard squash each year, selecting the best specimens for seed which is sold in large quantities to a nationally known seed house.

Mr. Rogers is affiliated with several farm organizations. He is a member of the Vegetable Growers of America. He has membership in the Boston Market Gardeners' Association and is a shareholder in the Boston Regional Produce Market and the Essex County Cooperative Farming Association.

It would be difficult to find a more progressive young farmer.

The Dairy Situation

Butter and cheese prices in December were the highest for the month since 1929. The factors which brought about the rise in the general level of commodity prices in the last three years have been important in raising



the prices of dairy products. In November total production of the principal manufactured dairy products was low, consumption was large, and stocks were reduced. Farm prices of butterfat in December were the highest in relation to feeds in two and one-half years. This price relationship will tend to stimulate production during the remainder of the feeding period, and production during the early part of 1936 will probably exceed the same period.

Combined receipts of milk at the three markets, Boston, New York and Philadelphia in November averaged 123,200 cans per day. This was 2.0 per cent more than a year earlier and 1.5 percent more than 2 years earlier. November was the fifth consecutive month in which combined receipts of milk at these three markets exceeded the same month of the preceding year.

Division of Historical Research,

A red raspberry plantation should last six to eight years or longer, depending on the care which weeds and diseases are kept out, and to some extent on the variety, according to specialists at Massachusetts State College.

Permanent Roadside Stands

Farmers and others have been operating roadside stands for a sufficient length of time that I think we may conclude that stands have come to stay. Certain practices, which have evolved, have been well received and occasionally other practices which are of doubtful value have been severely criticized. Among this latter class it is probable that the selling of produce not produced on the immediate farm or on the farms of nearby farmers will do more to disrupt the enterprise and cause the individual farmer to lose.

It is our purpose to make certain constructive suggestions, and with that in mind we wish to call attention to the desirability of growing products, especially fruits and vegetables, of the highest possible quality. The care of the product between the harvesting and the purchase by the consumer is very important but may not need to be discussed here.

Unquestionably the farmer and his family should spend considerable time in learning the needs and demands and tastes of his customers, especially those who appear to be candidates for regular and continued patronage. Let the fruit stand proprietor realize that eventually varieties of high quality will win out. The consumer would have very little occasion to continue to purchase Kentucky Wonder beans when the tenderest and choicest stringless varieties could be purchased instead. The same thing will be manifestly true of some of the outstanding varieties of sweet corn, tomatoes, lettuce, celery, and other delicious vegetables. As soon as the farmer has established this fact then it is time to plan most carefully for the long, seasonal succession of these varieties.

Whatever may be true of vegetables should be doubly true of fruits and berries. The purchaser seldom questions a small increase in price if the strawberries, raspberries, blackberries, and grapes are well ripened, firm, and of highest quality. Information is available now through the agricultural schools, colleges, and experiment stations so that the grower may be able to learn of the highest quality fruits without the necessity of long, tedious, and wasteful experimentation.

As a specific example, in fruits we now have among the new varieties of apples, plums, grapes and berries varieties of superior quality. It is our

(Continued on page 3, col 2.)

Since generally there are few or no feeding rootlets near the trunk of the tree, there is no use in applying fertilizer nearer than two or three feet from the trunk of bearing trees.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION
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Calendar

January 27—Home Nursing Classes with Mrs. Mary Roundy, at Nurses' Home, Salem Hospital. 7.30 P. M.
January 28—Home Nursing Classes at Clifton Community House. 2.30 P. M.

January 28—Joint assembly with the homemaking and agricultural students of this School meeting in Agricultural Hall.

January 29—Professor Frandsen will speak to undergraduate dairy students of the School.

January 29—Graduation exercises of Dairy Evening Unit course students. Professor J. H. Frandsen of the Massachusetts State College will address the graduating members. 8.00 P. M.

January 30—Home Nursing Class at the Horace Mann School under the instruction of Mrs. Mary E. Roundy. 2.30 P. M. Evening meeting at this School (Homemaking building) 7.30 P. M.

January 31—Senior Dance at 8 P. M. in Agricultural Hall.

February 6 and 7—Miss Grace B. Gerard will be in county to visit members of Home Accounts groups to whom she lectured.

February 15—Boston Market Gardeners will meet at the John Marion farm in Woburn. Time: 12.30 P. M.

The Future Farmers of America are actively engaged in making up lists of seed prices. Seeds purchased in bulk from a Farmers' Organization are bought by the Future Farmers and distributed among members of the Association at moderate prices.

Fruit Cobbler

Isn't it helpful to have a dessert that may be served frequently and yet not recognized by the family as the same thing? Fruit cobbler is such a dessert because it may be made with many types of fruit. It also has the advantage of being inexpensive and very nutritious. Fruits are excellent sources of minerals and vitamins and here is a good way to serve them. Perhaps you call this a deep dish fruit pie but whatever name you use it is an excellent dessert.

Speaking generally, fruit cobbler is baking powder biscuit baked on top of fruit in a cake pan. In other words, put a generous layer of cooked and sweetened fruit in a pan and cover with a rich mixture such as you might use for shortcake. Egg or sugar with extra butter in your own baking powder biscuit mixture make this a richer dessert.

Suggested combinations recommended by the foods department of this School, are:

1. Sliced apples, or apple sauce served with lemon or nutmeg sauce.
2. Stewed or canned apricots with a sweet sauce.
3. Crushed pineapple with pineapple or lemon sauce, (Mint flavoring added to this is delicious.)
4. Sliced peaches with lemon or peach sauce.
5. Raspberries or loganberries.
6. Sour cherries with cherry sauce.

The last named is one of the best and here is the recipe:

- 1 can sour red pie cherries
- 1-2 cup sugar (more if desired or necessary)
- 2 tablespoons tapioca

Mix these ingredients using some of the cherry juice to make good consistency and put in bottom of cake pan.

- 2 cups flour
- 5 teaspoons baking powder
- 1 tablespoon sugar
- 1-4 teaspoon salt
- 1 egg (not necessary)
- 1-2 or 3-4 cups milk

Mix as baking powder biscuit. Shape on board to size of pan and place on top of cherries. Press into corners so fruit is well covered. Bake in moderately hot oven (375 degrees) until biscuit mixture is well cooked. Make a sauce by thickening the left-over cherry juice and sweetening to taste. This may easily be diluted with water if there is not sufficient left. If you desire a richer sauce, make mixture too thick and dilute to correct consistency with whipped cream.

And while we are speaking of this type of dessert, have you ever rolled a baking powder biscuit mixture out thin and spread it with fruits? Or have you rolled it up as a jelly roll, cut the slices and baked them? And served it with whipped cream? In using sliced apple for the latter, put a small amount of maple syrup or honey in the bottom of the pan and place individual slices on it.

R. Emerson, Instructor in Foods

News of the School At a Glance

January 2

The Reverend Paul Sheldon of Topsfield, addressed a joint assembly of the homemaking and agricultural departments on the subject of "New Year Thoughts". The students fell into eager accord with his belief that unless individuals overcome circumstances, circumstances will overcome individuals.

January 20

Mr. Mostrom, the school meteorologist, estimated a fall of twelve inches of snow during the first noticeable storm of the season.

January 31

Students are anticipating the annual Senior dance on this date at eight o'clock in Agricultural Hall.

Public Speaking

The Public Speaking Contest sponsored annually by the Future Farmers of America will have its preliminaries in February. The local contest at this School is scheduled for February 26 and 27. On March 6, Norfolk and Bristol contestants will meet here and on March 20 the State contest will be held at Amherst.

The following students will participate in the local contest:

Carroll Killilae, Nahant; Fred Scribner, Topsfield; Augustine Sheehy, Lawrence; Charles Mahoney, Lawrence; Palmer Jones, Salem; Alger Marshall, Essex; William Corning, Beverly; and John Marshall, Danvers.

New Bulletins

A new bulletin for poultrymen has recently been written by John H. Vondell of the Massachusetts State College. It is Extension Leaflet No. 160 entitled "Quality Eggs" and may be had for the asking.

Bulletin No. 141, "Artificial Lighting For Poultry" has been revised and will be sent upon application to the Extension Department, Massachusetts State College, Amherst.

A mimeographed leaflet by Mrs. Esther Cooley Page is now available free to Massachusetts residents. It contains full directions for changing drab clothes to bright ones. It may be obtained by writing to the Mailing Room, Massachusetts State College, Amherst.

Wanted

For the School Museum of Farm and Home Antiquities a "Girting" (Girthing) Chain formerly used in measuring oxen. A Foot Lathe for wood turning.

Please communicate with H. P. Thurlow, Antique Keeper.

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

JANUARY, 1936

STUDENT EDITORS

Homemaking Department

Helen Chase, Newburyport
 High School Special
 Florence Hirst, Methuen Senior
 Josephine Hogan, Swampscott Senior
 Ruth Riley, Lawrence High School Special

Agricultural Department

Leonard Duratti, Swampscott
 Sophomore
 Norbert White, Lynn Junior
 Vincent O'Donnell, Lynn Senior
 John Marshall, Danvers Sophomore

ECHO CLUB

Members of the Echo Club Program committee have an interesting prospectus for the remainder of the year. Each third Wednesday of the month a guest speaker will supplement the regular business meeting.

On Wednesday, January 16, Mr. Metcalf, an instructor in the Agricultural Department, spoke on Parliamentary practice.

On January 29 an Amateur Contest will take place when each home room representative will be allowed five minutes on the stage. The winner will be decided by the applause given each contestant.

The students responsible for these entertainments are: Claire Moran, Chairman; Emily Currier, Louise Semple, Phyllis Marks, Helen Hayden and Stacia Grabowska.

FUTURE FARMERS OF AMERICA

The Executive Committee of the Future Farmers of America is considering bids for the lease of the roadside stand for the season of 1936.

The Welfare Committee will act on a plan for securing money to purchase sweaters and letters for the boys of the various athletic squads.

Student Treasurers, William Hayes, Stanley Bickford, and Elmer Smith are making an analysis of F.F.A. committee expenses.

In an effort to make Farmers' Day as successful as Science Week, plans are being made by the committee in charge to provide student help.

Mr. Horace J. Shute, county leader of the 4-H Club, gave an interesting talk on the work of that organization. Slides were shown demonstrating the actual working out of 4-H club project.

Mr. Granger, apprentice instructor at this School, addressed the Animal Husbandry Club at a recent meeting. His subject was "From Cow to Consumer." Dr. Babson will be the speaker at the next meeting.

Mr. Arnold M. Davis of the Massachusetts State College, spoke at the last meeting of the Bee Club on "Flowers Producing Nectar in Pollen."

NW

BASKETBALL

Essex Aggie — Wakefield

The basketball season opened at Wakefield with a fast game which featured the playing of Stanley Bickford. The first half looked dark for the Aggies, but in the second half the team smoothed down and emerged victorious with a 19-14 score.

The second team game proved to be the main event of the evening. The game was so exciting and competition so keen the first string five was sent to the lockers until the close of the game. Again we came out on top defeating the opponents 28-27.

Essex Aggie — Gloucester

Losing out by a score of 22-21 the Aggies dropped their first game of the season to Gloucester. The fine playing of "Pete" Curtis and Stanley Bickford kept us very much in the game. The seconds lost the opener with a 16 to 7 score.

Essex Aggie — Swampscott

We were threatened with another defeat at the hands of Swampscott as a result of their tricky defense. The score at the half was 6 to 4. However, the boys came in true to form and the game ended with a 24 to 16 victory, thanks to Lew Norwood who scored 9 points in the second half.

The scoring ability of "Red" White helped the seconds to win with a 25 to 11 score.

Essex Aggie — Alumni

On January 10 the Alumni Basketball team under the management of Horace J. Shute came to the Aggie gym with the strongest combination we have seen in quite some time. Essex led throughout the game but the score was so close there was no telling how the game would end. A last minute basket from the middle of the floor by Chlebowski of the Alumni brought the final score to (Alumni) 19, (Essex) 20. Among the alumni who returned to play were Robert Bartlett, George Bulgaris, Wallace Rennie, Orin Woodman, Robert Bolcome and Stanley Chlebowski.

Essex seconds lost their game, 25 to 18.

NW

CLASS OFFICERS

The following students were elected by the respective classes to hold office during the year 1935-1936:

Seniors

President, Stanley Bickford, Lynnfield Vice-Pres., Freda Peterson, Newbury Treasurer, Charles Clinch, Middleton Secretary, Ethel Louis, Newburyport

Juniors

Pres., Joseph D. Lydon, Jr., Nahant Vice-President, Beverly Bird, Saugus Treas., Theodore Smolak, No. Andover Secretary, Edna Bowers, Lynn

SENIOR DANCE

Members of the Senior Class have spent time and thought on preparations for the annual dance and are trying to make it a success. The dance will be held in the assembly hall of the Agricultural School.

To the sweet rhythmic strains of Truman Carew's orchestra the members of the class will dance on Friday, Jan. 31. The members of the committee are: Chairman, Woodward Walker, Salem; Claire Dooley, Salem; Helen Haydon, Peabody; Lewis Norwood, Rockport; and Bertha Bowers, Lynn.

Students responsible for the decorations are: Chairman, Edna Goodale, of Danvers; Charles Clinch, Middleton; Edward Bessom, Lynn; Hollis Lufkin, Gloucester; Arthur Pohiu, Peabody; Rose Mills, Methuen; Claire Moran, Lynn; Ethel Stasinopoulos, Salem.

Members of the ticket committee are: Chairman, Evelyn Young, Lynn; Gertrude McAdoo, Saugus; Priscilla Preston, Ruth Dixon, Lawrence; Vincent O'Donnell, Lynn; Harry Sears, Amesbury.

The matron committee members are: Chairman, Evelyn Homan, Wenham; Beatrice Lovers, Danvers; Freda Peterson, Elizabeth Poland, Newburyport; Albert Collins, Danvers; Arthur Glackin, Peabody.

In the receiving line will be Director and Mrs. Fred A. Smith, Mr. and Mrs. Carleton Stearns, Mr. and Mrs. Clarence M. Wood, Miss Ethel Moore, Miss Ruth Emerson, Mrs. Abbie Clapp, and Mrs. Myrtle Dunn.

JH VO'D

BASKETBALL LINE-UP

Wakefield Game

		Fouls	Goals	Pts.
N. White	rf	0	1	2
Munroe	lf	0	0	0
Norwood	lf	0	1	2
Bickford	c	0	3	6
Wilson	c	0	0	0
Santin	rg	1	1	3
Clinch	rg	0	0	0
Ranta	lg	0	1	2
Sano	lg	0	0	0
		1	9	19

Gloucester Game

Curtis	rf	0	6	12
Norwood	lf	2	0	2
Bickford	c	1	2	5
Santin	rg	0	0	0
Ranta	lg	0	1	2
		3	9	21

Swampscott Game

Ranta	lg	0	1	2
N. White	lg	0	0	0
Santin	rg	0	2	4
Norwood	c	3	3	9
Curtis	lf	1	1	3
Bickford	rf	4	1	6
		8	8	24

ATHLETICS

"Bob" Farmer, Essex Aggie all-round athlete, who is also very prominent in Lynn athletic circles, will officiate in Park League basketball this winter.

"Gary" Sano, who played smart football this fall, was there with the goods in the old "25" play. He has proved himself a valuable asset to the basketball squad.

"Jake" Ranta and "Pete" Curtis played a great game for the Aggies in their own home town when the boys went down to play the fish city.

"Grandpa" Clinch was unable to play against Swampscott High, his dear old Alma Mater because of the age limit.

Gildo Santin knows how to set the other boys down when the going is rough. It did not take Swampscott long to become well aware of that.

Our two-hundred pound basketball manager, Mavros, is an expert at taking it easy. Ask Assistant Manager Killam.

NW

FOOD SHOP OPENS

On Wednesday, Jan. 22, a food shop managed by senior girls majoring in foods, was opened in the homemaking school. A bulletin announcing foods and prices will be posted regularly in the main corridor of the Homemaking Building. Orders will be taken on Tuesday of each week and none will be accepted later than nine o'clock Wednesday morning. These orders will be ready at 3:25 P. M., Wednesday afternoons. The girls must see that each article is delivered and paid for.

On Wednesday, January 15, there was an exhibit in the show case of the various types of foods which may be ordered. These included chocolate fudge, fruit or sugar cookies, mocha cake, and standard butter cake with boiled frosting. As the girls gain experience other foods will be added to their sales' list.

This enterprising group of girls includes Doris Cook, Nahant; Florence Hirst, Methuen; Gertrude McAdoo, Saugus; Olive Drew, Saugus; Claire Moran, Lynn; Lella Moore, Salisbury; Ethel Webb, Danvers; Agnes Burke, Methuen; Kathleen McAuliffe, Lawrence; Anita Granville, Marblehead; Claire Dooley, Salem; Betty Johnson, Salem; and Freda Peterson, Newbury.

FH

PRIZE CONTEST FOR 4-H CLUBS

A tent caterpillar eradication campaign is to be conducted among 4-H clubs in Massachusetts during the first week in March. (March 2-7.) There are two reasons for this campaign of which the most important is the expectation that damage to our roadsides and other places will be materially decreased by destroying the egg clusters of the tent caterpillar, and secondly, for the value it will lend to 4-H club boys and girls.

All clubs are to participate. Prizes will be offered to individual members as well as to local clubs in the county.

Please write to Horace J. Shute, 4-H club Agent, Hathorne, for detailed information.

PROJECT HOURS

Two thousand ninety-one hours spent on projects pertaining to Christmas activities! When each girl was making her home project I am sure she did not realize that such a grand total would be reached by the student body.

After Thanksgiving the foods classes were taught to salt nuts and make various kinds of candies. Instructions were given the upper classmen in preparing and roasting chicken so it was but one step to the Christmas turkey.

Therefore the girls had an excellent opportunity for selecting home projects during the Christmas vacation. We may be shown how to make things in school, but unless we practice at home where we have to rely on our own judgment and kitchen facilities we shall never really learn its adaptation. It is for this reason we have home projects.

I wonder if we have ever stopped to think just how much time they do take. We become so accustomed to making home projects that we are inclined to treat them lightly. However, they do take up a great deal of time. You probably will be greatly surprised to learn that the total hours spent on Christmas projects in foods was 987 1/2 hours. This included work among the freshmen, juniors, and seniors in the making of candies, salting nuts and preparing Christmas dinners.

Dolls

Now let us turn to other Christmas projects. In "Child Care Study" the Seniors and High School Specials dressed 18 dolls, made 63 stuffed animals, 1 bassinette, 1 bed, 2 babies' pillows, 1 baby spread, 2 babies' bibs, 2 bunny carts, 5 picture books, 2 toilet trays for infants: a total of 97 articles and approximately 800 hours were spent on these articles.

Most of these articles were given away as Christmas presents by the girls who made them. Others were left with Mrs. Roundy who distributed them among deserving children. These toys were sent to Andover, N. Andover, Beverly, Boston, Danvers, Essex, Gloucester, Haverhill, Hathorne, Lynn, Lawrence, Marblehead, Methuen, Medford, Newburyport, Nahant, Peabody, Rockport, Roxbury, Saugus, Salem, Salisbury, Swampscott, Worcester, Hartford, Conn.; Vermont, Seabrook, N. H.; Fairlawn, Ohio; and California.

Clothing

Sewing projects did not play as important a part as foods during the Christmas vacation but this is to be expected. At Christmas time one is inclined to think more about food than clothing.

However, two hundred ninety-four hours were spent by the freshmen girls in making Christmas gifts. The gifts included children's aprons and dresses, women's aprons, collar and cuff sets, and stuffed animals.

If you add up these figures you will find that approximately twenty-one hundred hours were spent on Christmas projects. Time does not matter when we are doing something really useful. In making the Christmas dinners, tired mothers were given a chance to really enjoy the holiday. The girls who salted nuts and made candy for gifts found it enjoyable and economical. Many needy children had a happier Christmas by receiving dolls and stuffed toys from the students, while those who received dresses and aprons appreciated the practical gifts.

RR HC

ESSEX JUDGING TEAMS TIE FOR THIRD

Essex fruit and vegetable judging teams won equal merits at the judging and identification contests held at the Union Agricultural Conference, Friday, January 10, in the Worcester Memorial Assembly Hall.

Each team placed third in its contest. Individuals who placed in the vegetable team were Walter Tataronis, seventh, and John Marshall, tenth. The fruit team had a similar average with Gordon Hall placing eighth and Merle Graffam ninth.

With eight teams participating in vegetable judging and six in fruit, Essex has again made at least a fair showing.

Paul St. Linger and Merle Graffam both partook in the vegetable contest while Theodore Smolak and Melville Low were included in the fruit judging team.

Special mention should be made of the fact that Walter Tataronis averaged fifth place in the final vegetable judging elimination contest and Gordon Hall won the third Massachusetts Fruit Growers' Association prize of \$10.

JM

TEA ROOM SERVICE

Tea Room Service is being carried out each Thursday in the faculty dining room. Five girls from the High School A division are responsible for this work each week. It is the duty of each group to decide on the name of the tea room, make out the menu, and menu cards besides acting as hostess and waitresses and preparing the food. It is run as nearly as possible like a tea room serving the public.

The following girls had charge of the first tea room: Bertha Bowers, Saugus; Pauline Buxton, Salem; Catherine Casey, Lawrence; Ruth Cahill, Gloucester; and Helen Chase, Newburyport. They selected Driftwood Inn for the name of their tea room. Menu cards were made in the shape of sail boats and the menu was as follows:

Tomato Juice
Baked Ham with Raisin Sauce
Scalloped Potatoes
Twin Mountain Muffins
Snow Pudding
Candle Light Salad
Custard Sauce
Cakes

Laura Chase, Newbury; Emily Currier, Salisbury; Mildred Day, Ipswich; Ruth Dixon Lawrence; and Abbey Ellis of Essex were in charge of the second tea room.

The girls are supervised by Miss Ruth Emerson, foods instructor. This work gives the girls experience in planning definitely for tea room work and gives them the different kinds of experience along this line.

FRH

AUTO REPAIR

The Auto Repair course offered to students each year opened under the direction of Mr. E. C. Lee of Beverly, Monday, Jan. 6. The course is built around farm motors and automobile repairing. The Junior class is at present engaged in the course. The Seniors will have their chance before the ten weeks' program is concluded.

WWH

Quality Milk Production

The beginning of a series of clean milk production demonstrations was held at this School January 14 before a capacity audience. Mr. Harry J. Lindquist of the Dairy Department of the Massachusetts State College conducted the demonstration which brought out many facts that should be considered by dairy farmers.

After pointing out some of the more outstanding changes in the production of market milk in this state, Mr. Lindquist said that there was still room for great improvement among the average producers. Much emphasis has been and still is being put on the inspection of dairy farms, but with or without inspection, there are certain factors which definitely determine the quality of milk.

Clean healthy cows are a necessary factor to be considered, with especial precautions taken against mastitis. T. B. used to be a factor, but now merits little consideration. Mr. Lindquist also emphasized the obvious fact that dirt from the cow's flanks must be kept from the milk.

The use of clean sterile utensils was a factor mentioned in the demonstration. Even if the cow and her udder are clean, the pails, strainers and especially the milking machines can offer a potent source of bacterial inoculation. Prompt cleaning of all equipment, the use of a top pail and a clean cotton disc filter pad were the principal items recommended.

Clean healthy milkers are perhaps the prime consideration, for without them the previously discussed precautions are not efficient. Two points were mentioned under this heading: (1) too many farmers are not careful of their clothes or hands at milking time, and (2) the farmer often feels that he must keep on with his work even though he may not be feeling well. In this way diseases are spread.

To complete the chain of vital requirements, the fact that milk must be cooled to below 50 degrees within two hours and held below that temperature was emphasized.

In closing the demonstration Mr. Lindquist, with the assistance of Instructor Eastwood of this School, passed around samples of milk especially selected to show the defects that are found in milk as a result of not following these fundamental rules.

Ralph H. Granger,
Apprentice Instructor

The winter flowering begonia is the most popular of the flowering plants for home culture at this season of the year. It is easy to care for, requires plenty of sunshine, a warm, humid atmosphere, and daily waterings.

Garden Chats

Just a month from now growers of cabbage and lettuce should start their seeds for the first early crop.

Do you recall the troubles that were mentioned last year? Perhaps you had some damping off of the little seedlings. It may be that you had such a bad infestation of damping off that you did not see the seedlings although they germinated. Be sure that you buy either seed that has already been treated or treat your own seed with corrosive sublimate at the rate of eight tablets to 1 gallon of water and soak for 25 to 30 minutes. Wash thoroughly for fifteen minutes and then dry.

Are you making your plans for 1936? Did you have a poor stand of some vegetables last season? It may be that you ran out of seed in planting a certain vegetable last year and you had some seed left from the year before which you planted to finish out the row. It came very poorly. It is always a good policy to have more seed than you really need and always remember that it is a lot easier to pull out extra seedlings that you may have planted too thickly than it is to transplant them into the row to have a perfect stand.

If you plan to use seed left over from last year, by all means test their germination so you will know how thickly to plant them. If they should germinate only 50% sow seed twice as heavily for a normal stand.

C. M. Stearns,

Instructor in Vegetable Gardening

ROADSIDE STANDS (Continued from page 1)

opinion that selective buyers are going to be steadily increasing and if the farmer does not rise to the opportunity he is neglecting a golden opportunity.

Let us make the above suggestion specific. In grapes with the new varieties such as Fredonia and Ontario, together with some of the highest quality older varieties, the roadside stand can be supplied for a month or two with the choicest fruits in this class. In apples, a succession consisting of Early McIntosh, Milton, Melba, and other easily worth mentioning will allow the roadside stand market to start selling worthwhile fruit in late July and continue with a quality succession long beyond the McIntosh period. Some of the new plums of the European type, such as Stanley, Hall, Albion, and several others, would add both beauty to the stand and quality for the benefit of the consumer. Plums are soily grown and handled.

This list might well be considerably extended, both to the profit of the producer and satisfaction to the consumer. Undoubtedly we will see great advances in this direction during the immediate succeeding years.

Weather Summary

1935	
Maximum temperature (July 19 and August 18)	93°
Minimum temperature (January 31)	-14°
Mean daily temperature	47.3°
Ten-year mean daily tem.	48.0°
Mean daily temperature 1934	47.2°
Total precipitation 1935	38.92"
Total precipitation 1934	41.82"
Ten-year average	40.7"
Snow fall 1935	60.5"
Snow fall 1934	57"
Ten-year average	44.7"
Rain fell on (1935)	106 days
Rain fell on (1934)	119 days
Clear days (1935) 146 (1934) 158	
Partly cloudy (1935) 107 (1934) 105	
Cloudy days (1935) 112 (1934) 102	
Total hous sunshine estimated)	(1935) 2393 (1934) 2457
Per cent sunshine	(1935) 53.7% (1934) 55.1%

Last frost May 24
First frosts (light on Sept. 17 and 24)
(heavy on October 3 and 5)

A feature was the cold weather and heavy snowfall of January. The average daily temperature was over 70° below the 10-year average for the month. 37" of snow were recorded.

On the other end of the year the weather was notable for the lack of snow.

The growing season on the whole was dry, the rainfall in both July and August being much below normal. October's rainfall of .47" was the lightest recorded in any month for the past 12 years.

The temperature for the year was somewhat below normal. It was below the 10-year average in January, April, May, June, September, October and December. February was exactly the same.

From the standpoint of frosts the growing season was satisfactory. No frosts were recorded at the school after May 24 (which was very light) until September 17 and 24 which were both light. The heavy killing frosts held off until well into the first week of October.

Sunshine was somewhat under normal, November in particular having the smallest amount of sunshine recorded in any month for 12 years except January 1932 when only 91.5 hours were observed.

H. A. Mстром

Fredonia is by all odds the best of the early black grapes, say specialists at Massachusetts State College. The vines are vigorous and hardy, the clusters compact and medium in size, and the berries large and juicy.

FARMERS AND
HOMEMAKERS
DAY

MARCH 18, 1936

Round About the County

In Prospect

Mrs. Alfred Shatswell of 6 Briggs St., Salem, is organizing a study group in Interior Decoration. The first meeting, with Mrs. Mary M. McIntire, Instructor, will be held February 12 in the Cleaveland Room of the Unitarian Church, Salem.

Spring clothing classes are now being organized. Please communicate with Mrs. Mary M. McIntire, Home Demonstration Agent, Hathorne, for detailed information.

Child Guidance

On February 14, March 20 and April 17 a group of thirty mothers will meet at the home of Mrs. Alvah Bradstreet, 11 Bridge Street, Danvers, for instruction in child guidance under Mrs. Ruth D. Morley at 7:30 P. M. On these same dates Mrs. Morley will conduct similar classes at 2:30 P. M. at the Essex County Agricultural School. Anyone interested in joining these classes should notify Mrs. Bradstreet or Mrs. John Maloney, 23 Central Ave., Danvers.

Garden Meeting

Arnold M. Davis, horticulturist of the Massachusetts State College will address the Beverly Garden Club at the Beverly Public Library on February 12 at 2:30 P. M.

Continuing

Clothing classes under the instruction of Mrs. Mary McIntire continue to be held at the Essex County Tuberculosis Sanatorium. Patients of the Sanatorium are given instruction on Monday and Thursday mornings each week and special classes are held for nurses of both the Sanatorium and State Hospital on Monday evenings.

Furniture Renovation

Classes in Furniture Renovation are meeting in Marblehead and Hamilton under the instruction of Mrs. Mary M. McIntire. Mrs. Russell F. Munroe of 87 Jersey Street, Marblehead is in charge of the Marblehead group which meets in the American Legion Rooms, Pleasant Street.

Mrs. William Lee, Main Street, supervises the Hamilton group meeting at the Hamilton Community House.

Home Nursing

Courses in Home Nursing under the tutelage of Mrs. Mary E. Roundy, R. N. are continuing in the county. Meetings will be held on the following dates:

January 27 at the Nurses' Home, Salem Hospital, at 7:30 P. M. with Mrs. John A. O'Keefe of the Salem Red Cross in charge.

January 28 at the Clifton Community House at 2:30 P. M. with Mrs. Mary E. Carruth, 14 Rose Ave., Marblehead, in charge.

January 30 at the Horace Mann School, Salem, at 2:30 P. M. with Mrs. Arthur Hennessey, 22 Wisteria Street, in charge.

January 30 at the Homemaking

A Message to Nature Lovers

Here is an opportunity for all nature lovers and people seeking to know more about nature and wild life to join a real club with a worthwhile purpose. This club is known as the Nature Club or as Mr. Farley would call it, the "4-F" 4-H Club.

The requirements for this project call for participation in a minimum of 4 major activities or the selection of any major topic to be carried on in connection with another project, i. e., a member enrolled in the Garden Project may elect to study anyone of the 4-F's in his nature project.

What are the 4-F's? That's just the question we want you to ask. They are Fur, Fin, Feather and Forests.

In the Forestry or tree study we may take up such topics as: the parts of a tree, how trees grow, why leaves change color, how to identify trees, how to make leaf prints, tree games, how to make twig baskets, treating pine cones for fire places, Christmas decorations and many other interesting topics.

A similar study will be made of each of the topics including fish, fires, flowers, wild birds, wild animals, frogs, ferns and a general program including visits to reservations and local parks, making nature trails, weekend trips, and a summary of wild life in your community, and arbor day programs and many other interesting topics.

I know this program is going to interest hundreds of boys and girls and I hope that we will be able to help them all but we must have leaders for each group. Folks, let's step out of our shells and help the youngsters along in this fine movement. Be a leader of a 4-H Nature Club.

H. J. Shute

Play-Writing Contest

Writing a one-act play is fun! If you are over sixteen, a resident of Massachusetts, and a non-professional playwright, you are eligible to enter the third amateur play-writing contest sponsored by the Extension Service of the Massachusetts State College.

Detailed contest rules will be sent on application to Miss Ruth McIntire, Extension Specialist in Recreation, Massachusetts State College, Amherst, Mass.

building of the Essex County Agricultural School, at 7:30 P. M. with Mrs. John H. Maloney, 23 Central Ave., Danvers, in charge.

Concluding

The Gloucester group in Child Guidance under the direction of Mrs. Ruth D. Morley, Child Guidance Specialist of the Massachusetts State College, is concluding its meetings this month.

Local Leaders Activities

Saugus, Thursday, January 16—An inspiring meeting of the town committee and local leaders was held at the home of the chairman, Mrs. Ethel Dominie. There were 22 leaders and assistants present representing 24 clubs and 185 club members.

The meeting started with a discussion of club material and club programs, which was followed by a short recreation period and an illustrated talk on club work in Massachusetts by Horace J. Shute, County 4-H Club Agent.

There were many interesting features brought out at this meeting, including the plans for a large garden enrollment for this spring under the leadership of Mrs. Lilla Merrithew who has had a great deal of experience with school gardens in connection with the Granges. Mrs. Merrithew is seeking leaders for each community who will supervise the local clubs.

Saugus Leaders

Mrs. R. S. Dominie has developed an excellent organization of leaders in Saugus, having secured all but three leaders this year and assisting in the organization of each of their clubs. Besides this Mrs. Dominie is starting to build up her work by having a local committeeman in each of the communities in Saugus which will help to keep club work going throughout the entire town. Those present were: Mrs. Irene Walton, Irene Wadsworth, Helen Curtis, Mrs. John Pearce, Mrs. Nish, Mrs. R. S. Dominie, Mrs. Ruth O'Neal, Miss Rand, Mrs. Rhodes, Mrs. Hammond, Miss Lois Brander, Miss Mae Priest, Dorothy Stevens, Mrs. Woodward, Winifred Gould, Mrs. Mildred Lovell, Mrs. K. W. Kenerson and Mrs. Lilla Merrithew.

Andover

In Andover Miss Clara Putnam has turned a similar program into action by developing a real live committee composed of members of the Parent-Teacher Association in Andover, Shawsheen and Ballardvale, and members of the Andover Garden Club. The members of this committee have started right in working. In Ballardvale we have two clothing clubs, a food club and a Handicraft Club. In Shawsheen we have a clothing club and the possibilities of a handicraft club. These are the first organized clubs in Shawsheen we have ever had. At the Stowe School we have a Dramatics Club, handicraft club and a hobby club, a nature club and a knitting club, along with two forestry clubs, two handicraft clubs and two clothing clubs. This is an excellent showing which indicates that the 4-H Club spirit has struck these two towns.

We are planning to hold a leaders meeting here shortly as well as in several other towns in the county.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 17

HATHORNE, MASS., FEBRUARY, 1936

NO. 2



WINTER SCENE

Dora Winchester, Farmerette

A lover of horses and keenly interested in horticultural pursuits, Dora Winchester, of Saugus, accepted a scholarship in September 1930 at the Essex County Agricultural School. Enrolling as a four-year student she at once set the pace in practical farm work as well as in academic studies for her male companions. In November 1934 she graduated, one of 3 girls in a class numbering forty. During her course she carried on four successful projects in vegetable gardening and floriculture which enabled her to maintain herself in school and establish herself in business.

While an undergraduate, Miss Winchester took an active interest in the Future Farmers of America, being elected secretary of the local chapter and the state association. Her work in the latter office merited the following comment from the state adviser: "Miss Winchester has been the best secretary we have ever had in the state association."

Miss Winchester won the coveted Honors' E awarded only to those students who reach a high standard in loyalty, scholarship and achievement. She won this letter twice during her four year course.

She has demonstrated that girl students are entitled to everything vocational agricultural has to offer.

Dora's first ventures in gardening were confined to a small plot of land in the rear of her home. Here she constructed hot beds, raised her own seedlings, and did her own garden work even to marketing the products. She carried on this work for two seasons realizing substantial profits.

After taking up floriculture she accepted positions in commercial greenhouses in Wakefield and Saugus thereby getting real business ex-

(Continued on page 3, col 3)

Farmers' and Home- makers' Day

Christmas and New Year's have shed their festive cloaks. The birthdays of Lincoln and Washington have been commemorated. And St. Valentine has had his day. But in with the March winds comes another day, historic in the minds of Essex County farmers and their families. To these people the third Wednesday of March has come to mean something vital and entertaining. For twenty-one years Farmers' and Homemakers' Day, instituted by this School, has been set aside in the interest of advancing agricultural knowledge.

This year, on March 18, friends will come to hear Professor J. H. Frandsen of the Massachusetts State College, whose travels in Denmark enable him to compare the agricultural practices of the Danes with our own.

Assisted by Professor H. G. Lindquist he will discuss milk and cheese problems, illustrating the lecture with slides.

Homemakers will hear, after lunch, Mrs. Ada Danforth of the Suffolk Consumers' Council for the United States Department of Labor, and Mrs. Louisa Skilton, Household Editor of the "American Cookery Magazine" and Assistant Director of the Home Information Center at Jordan Marsh Company.

Adhering to a schedule of past years, sectional meetings will occupy the afternoon. Each section will learn the agricultural outlook in its particular field.

Poultrymen, in addition to a discussion by Professor F. H. Branch, may anticipate a baby chick show and auction.

Fruit men and market gardeners will meet together to hear the manager and auctioneer of the new Re-

(Continued on page 2, col. 1)

Pruning Suggestions

Many people think every tree and flowering shrub should receive annual pruning. Some would do it only in winter or early spring; others during summer and fall, keeping in mind only the thought that it must be done.

With many of our plants some pruning is essential at times, but feeding, careful cultivation or mulching and protection against insect or disease infestation are in many cases of more importance.

Far too common is hedge shear pruning, leaving the shrubs with their tips snipped off regularly, involving an artificial symmetry and loss of natural grace.

Prune to regulate height but not to destroy natural form. Remove interfering, injured, diseased, or dead branches; renovate or rejuvenate old plants; encourage a smaller number of larger flowers, or encourage branching and an abundance of smaller flowers. The result is always worth the effort. Because ornamental plants are never over-supplied with flowers for the plant lover the real problem is to preserve all the buds nature makes to produce these flowers.

Remember that early flowering shrubs and trees produce their flowers and fruits from buds formed on wood grown after bloom and before winter. What will happen if these plants are winter—or spring—pruned? Each live piece removed takes with it buds that were intended for flowers. Forsythia, white-flowering spirea and mock oranges fall into this class. These plants may be pruned severely, if it is desired that their size be reduced, within a week after their bloom is complete. Follow this pruning a few weeks later by pinching off the tips of those shoots which are growing too fast.

(Continued on page 2, col. 2)

Essex Farmer and Homemaker

HATHORNE, MASS.

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Secretary, R. H. Campbell Topsfield

Calendar

February 27 and 28—Public Speaking preliminary contest at this School.
February 28—Basketball game with Bristol County Agricultural School here—7.30 P. M.

March 6—District Public Speaking contest at this School.

March 6—Annual Junior Prom.

March 20—State Public Speaking contest at Hatfield.

FARMERS' DAY

(Continued from page 1)

gional Market. In addition, Professors G. A. Potter of New Hampshire University, and W. H. Thies, of the Massachusetts State College, will talk with fruit growers.

G. B. Snyder will speak to the market gardeners on the ways in which crops in the Middle Atlantic States and Connecticut affect ours. R. E. Young will discuss Florida's handling of its plant food situation, and W. D. Whitcomb will also speak.

Dairymen will hear Professor Frandsen and H. G. Lindquist in addition to a speaker on mastitis control.

At this printing the entire program has not been completed. Full details of speakers and their subjects will appear in local papers.

The site of the strawberry plantation should have a gentle slope so as to provide good water drainage, and also air drainage as a protection against frost at blossoming time.

Combing Bad For Wet Fur Coat

Don't comb your fur coat when it gets wet. It may cause falling hair or baldness of the pelt. Give it a shake and let it dry slowly in a good circulation of cool air.

Such is the advice of Mrs. Esther Cooley Page, extension clothing specialist at Massachusetts State College. Combing is likely to pull out the hair, especially when a coat is wet, and drying the fur too fast may ruin it altogether, she says.

Here are seven points she lists for the proper care of fur garments. Have them cleaned once a year by a reputable cleaner who understands the cleaning of furs; give them a vigorous shaking now and then; keep cuffs and collars clean with Fuller's Earth, cornmeal, or wet sawdust; if the air is dry, keep a dish of water in the closet where the furs are hung; put them in cold storage when not in use; keep moths away; don't comb them when they are wet.

The price paid for a fur coat has little to do with its durability, Mrs. Page says. Some of the more expensive furs do not last as long as those from more common animals. A great deal depends on the care the owner gives to the coat and the use she puts it to.

She also urges women to get better acquainted with the qualities that go to make up good value in furs, such things as the names of animals from which the pelts come; whether the fur has been dyed or not; whether the fur is thickest at collars and cuffs, elbows, and pockets; whether the guard hairs have been plucked or clipped; whether the fur has been "pointed"; the fit of the coat; strength of the fur; and quality and strength of lining.

Even with this knowledge buyers should go only to reputable furriers. Some fur qualities are obscure and no one but experienced fur buyers can tell what quality furs they are getting.

PRUNING

(Continued from page 1)

Late, flowering spireas, the butterfly bush, and hydrangeas belong to a group which make their flowering wood and buds in spring, opening their flowers from June to September, and so may be heavily pruned in winter and spring.

Another group, including lilacs and flowering dogwood make very short growth, retain good form, and require very limited cutting.

"Prune when the shears are sharp" is still sound advice but may I add: the one who is to use the shears should make a careful study of the plants before using them.

C. S. Wright,
Instructor in Ornamental Gardening

Garden Chats

How frequently are we told by our friends that certain of their varieties have given a fine yield and the quality was unusually high. When you hear your friend tell you about his vegetables you wonder if you are growing the best varieties for the highest quality. Why not glance over your seed catalogues now and decide on just what you will plant next season. At the school market garden the following varieties have proved to be of excellent quality and of high yield for the back yard gardens and in most cases for the commercial gardens.

Beans: green bush, Bountiful, stringless green pod wax bush, Sure crop, pencil pod black wax pole, Kentucky Wonder, green or wax.

Beets: Crosby Egyptian.

Cabbage: Golden Acre (Early) Penn State Ball Head (late).

Carrots: Danvers half long, Nantes. Corn: Extra Early Golden Bantam, top cross Bantam.

Cucumbers: Arlington White Spine, Improved Long green.

Lettuce: White Big Boston, New York, Iceberg.

Onion Sets: Japanese or Ebenezer.

Peas: World's Record, Laxtonian.

Parsnip: Model.

Peppers: Waltham Beauty (Sweet), Squash (hot).

Radish: Scarlet Globe.

Spinach: Bloomsdale (early), Blight resistant Savoy (late).

Summer Squash: Straightneck.

Winter Squash: Delicious, Blue Hubbard.

Tomatoes: Bonny Best, Johnn aBer, Marglove, Comet (for staking primarily).

Turnip: Purple top milan (early), Purple top white globe (late).

C. M. Stearns,

Instructor in Vegetable Gardening

4-H Club Activities

Here's a record for you: on the report card of their last meeting Martha Hurd, Secretary, reported that the Onwego Club has had perfect attendance for twelve consecutive meetings. Can you beat it? Doris Albrecht is the leader of this Club.

The Red Rooster Poultry Club of Saugus is carrying a dual program. Besides being one of the best poultry clubs of the county, it is also doing a good job with a conservation program.

Cleanliness is the keynote in profitable poultry keeping, and is also the best aid in checking the inroads of parasites. Hen houses open to the air and sun, dry and well ventilated, are easy to keep clean. Interior fixtures, especially roosts and nests, should be of simple design and construction with a minimum of cracks wherein parasites may hide and dirt accumulate, so that sanitation may be easy and economical of labor.

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

FEBRUARY, 1936

STUDENT EDITORS

Homemaking Department

Helen Chase, Newburyport
High School Special
Florence Hirst, Methuen Senior
Josephine Hogan, Swampscott Senior
Ruth Riley, Lawrence
High School Special

Agricultural Department

Leonard Duratti, Swampscott
Sophomore
Norbert White, Lynn Junior
Vincent O'Donnell, Lynn Senior
John Marshall, Danvers Sophomore
Walter Hichens, Middleton Junior

ALUMNI NOTES

Woodbury and Robert Bartlett, classes of '33 and '32, are employed at the Chabacco Nurseries in Essex.

Lester Dixon and Frances Whitely both of the class of '33, were married at Concord, N. H., September 27, 1935. They are now residing in Andover.

Theron Johnson is employed on a poultry farm in Middleton.

Raymond Alley is at the Shattuck Farm in Andover.

Fred Anderson, class of '33, is at the Hobb's estate in Beverly.

Katherine Kolhonen is attending the Modern School of Costume Design in Boston.

Mildred Higgins entered training classes at the Addison Gilbert Hospital in Gloucester last September.

Kenneth L. Sprague visited the school recently and gave an interesting talk to the Seniors on his experiences on the Transport Henderson of the United States Navy. Ken would like to hear from his friends and classmates. Address your letters to K. L. Sprague, Sea. 1 C, U. S. S. MacDonough (351), Navy Yard, Boston, Mass.

Alfred Caproni, '34, and Michael Picokowicz, class of '33 are enlisted in the 143rd Company of the CCC stationed at Savoy Camp, North Adams, Mass.

Stanley Chlebowski, former student, is working for the State Highway Department.

Elmer Flanders, class of '33, and Mrs. Flanders, the former Alice Berry, have an addition to their family.

Mr. and Mrs. Caesar Roland are the proud parents of one child. Mrs. Roland was Alice Silva before her marriage.

Robert Bolcome, class of '33, now employed at the Stoddard estate, Bass Rocks, plans to take the marital leap with Eleanor Grace of Gloucester next July.

David Carter, class of '33, is at the Bailey estate, Bass Rocks. He was an enthusiastic spectator at the recent alumni basketball game.

Alvin Courant, former student, is employed as an agent for the John Hancock Life Insurance Company in Lowell.

William Chase, class of '32, has a daughter, Elizabeth Ann, born January 27, 1936.

STYLE POINTS

Let's take a peek at the smartest frocks and fashions. Gray leads the line of fashion color for the season. It's the peppiest note you can add to your winter or spring wardrobe.

Two-piece dresses with tucked tops trimmed with rows of fine ruching or skillful tucking give a soft draped look and are smart. Men's-wear flannel skirts with front fullness and matched tailored flannel jackets are much in vogue.

Going places? Then your dress must have short sleeves. Just arriving on the scene, they're brisk, young, and altogether refreshing. College girls are taking them back to the campus for the second semester tea dancing, sorority affairs and informal evenings. The sleeves are perky with fullness at the top, held in tightly just above or below the elbows and give the shoulders a broad look.

Waistlines are a bit higher and tied tightly with a sash to keep the slim and flat front, or a self-belt of medium width stiffened with stitching to stay in place.

Skirts are gracefully flared to accentuate the fitted waist. Shoulder lines are broad and give freedom for dancing.

Frocks that you buy now are to brighten the winter coats and brave the spring sun later.

Typical 1936 prints are finely patterned with black, brown, wine, or rust backgrounds and all kinds of odd little patterns, fantastic flowers, wild horses, modernistic deer and all the letters of the alphabet.

Note that 1936 introduces higher neck lines, jeweled touches, graceful and very full sleeves, and shirring. PT

SPEAKERS AND EXHIBITS

The homemakers are fortunate in having Mrs. Ada Danforth and Mrs. Louisa Skilton as speakers on Farmers' and Homemakers' Day, Wed. March 18.

Mrs. Danforth is the market investigator of the Suffolk Consumers' Council for the United States Department of Labor. Her subject will be "Mrs. Consumer Wants to Know."

Mrs. Skilton is Household Editor for the American Cookery Magazine and the Assistant Director of the Home Information Center at the Jordan Marsh Company. She will speak on subjects very pertinent to the homemaker.

All departments in the homemaking building have planned interesting exhibits, as follows: Art: exhibits of handicraft and costume design; Foods: honey and its uses in foods; Science: science in relation to the home; Clothing: exhibits of clothing made at school, with a demonstration of scarf-making and frogs to be used as decorations for dresses; Child-Care: nursery and reports made by girls as school work; Academic; illustrations of Silas Marner and book exhibits in the library.

THE AMATEUR HOUR

During the afternoon of January 29 the Echo Club sponsored an Amateur Hour program. Each home room was represented.

The Freshmen presented a one-act play entitled "Friends in Need." The cast included Eleanor Hoelzel, Barbara Rundlett, and Gertrude Nyman. Two girls who attended the homemaking department of "Essex Aggie" helped a friend out of a difficult sewing problem and suggested that she take a course at "Essex Aggie."

The High School B's were represented by Barbara Metzgar, who did a tap dance and by Beatrice Emerson and Priscilla Preston in a piano duet.

For the High School A's, Ruth Dixon gave a reading entitled "Two Houses," Pauline Buxton and Beatrice Loveys gave a piano and steel guitar duet.

Freda Peterson, Olive Drew, Anita Granville, and Florence Hirst represented the Senior Division. Misses Peterson, Drew and Granville presented a skit, "Pete Peter and His Two Henchmen," and Florence Hirst sang "Red Sails in the Sunset."

The Junior B's presented "An Abbreviated Tale" with the following cast: Winifred McKay, Phyllis Marks, Helen Lucas and Florence Downs.

Yolanda Scamperino represented the Junior A's by singing "Moon Over Miami," and Marcelle Berwick sang "I've Got a Feeling You're Fooling." Miss Berwick represented the Freshmen A's.

The program ended with "The Music Goes Round and Round" by the Essex Aggie Kitchen Serenaders. The leader of this tin pan band was Josephine Hogan. The players were Marjorie Hudson, Mildred Humphreys, Phyllis Thompson, Evelyn Homan, and Evelyn Young.

Everyone was well entertained by this program, and much talent was recognized.

HC

SENIOR DANCE

The music went down and round and it came out there. Where? At the Senior dance held in Agricultural Hall on the evening of January 31. Students and their friends kept in step with Truman Carew's orchestra.

The decorations were elaborate, consisting of awnings of dark brown and cranberry colorings.

Members of the senior class, alumni, and others participated in the grand march which was led by Stanley Bickford, president of the class. Novelty hats and noise-makers were aplenty, and the shower of balloons presented a colorful spectacle.

Those in the receiving line were Miss Ethel M. Moore, Mrs. Abbie Clapp, Mrs. Myrtle Dunn, Miss Margaret Harris, Miss Ruth Emerson, Miss Verna Clarke, Mr. and Mrs. C. M. Stearns, and Mr. and Mrs. C. M. Wood.

V O'D

LD

FH

GREEN AND WHITE NEWS

By the time this paper reaches you the "Green and White" will be on its way to press. The "Green and White" is our school magazine and is published twice a year.

This issue promises to be one of the best ever put out. The articles are written by the students and it is the desire of the staff to have these articles centered about interesting happenings at the school, which will include news about the school activities.

The editorial board includes: Editor-in-Chief, Edward Bessom, Lynn Assistant Editors, Phyllis Marks, Lynn

Walter Hichens, Middleton Alumni, Florence Woodbury, Middleton James Keane, Lynn Echo Club, Helen Lucas, Peabody F. F. A. Joseph Lydon, Nahant Senior Section.

D. Woodward Walker, Salem Sports, Kay Johnson, Salem

Lewis Norwood, Rockport Art, Stacia Grabowska, Danvers

Joseph Blunda, Ipswich Humor, Elinor Senior, Byfield

Albert Collins, Danvers Exchange, Ruth Peterson, Beverly

James Cashman, Peabody Business Managers,

Amelia Tataronis, Salem Henrietta Stockley, Peabody

Kenneth White, Salem Francis Gillen, Lawrence

Elmer T. Lutton, Wenham
FH

ANNOUNCING

On Friday, March 20, F. F. A. delegates from all over the state of Massachusetts will hold their annual meeting in Amherst to report the achievement of and make future plans for the organization.

A feature of the day will be the public speaking contest, also state-wide, in which the best speaker from all the F. F. A. chapters will be chosen to represent Massachusetts at the National Convention at Kansas City.

F. F. A. and 4-H judging will also be on the program during the day, culminating the year's victories for the winning teams. Silver cups will be awarded at this time to those teams which have been consistent in winning highest merits.

JM

STUDENT HOME ECONOMICS CLUB

On February 5 Miss Hazel Kirk gave a most interesting lecture on Japanese home life. She showed costumes and pictures of that land.

In March there will be a business meeting of the student home economics club. Mrs. Marion Rudkin of Beverly will be guest speaker.

On May 5 the Echo Club will present a marionette show depicting the life of Peter Rabbit. There will be moving pictures of work done by the Animal Rescue League in cooperation with Sir Wilfred Grenfell of Labrador.

HC

ANNUAL JUNIOR DANCE

Plans are being made for the annual Junior Promenade which will be held Friday evening, March 6, in the Agricultural building. The various committees have been selected and are actively engaged. At this time the orchestra has not been selected.

Betty Beale, Nahant; Marjorie Colby, Saugus; John Fullington, Peabody; William Long, Lawrence; and James Keane, of Lynn are serving on the orchestra committee.

Members of the refreshment committee are: Beverly Bird, Saugus; Phyllis Marks, Lynn; Carroll Killillae, Nahant; Archie Nimmo, Methuen; and Philip Webber, Middleton.

The following were elected to serve on the matron's committee: Hilda Putnam, Peabody; Florence Woodbury, Middleton; Norbert White, Lynn; Francis Gillen, Lawrence; and Sargent Griffen, Gloucester.

Serving on the decoration committee are: Frances Parent, Salem; Phyllis Steele, Middleton; Christy Mavros, Lynn; Warren Towne, Beverly; and James Cashman.

Barbara Clark, Lynn; Thelma Alexander, Nahant; Merle Graffam, and George Foster of Peabody, are members of the ticket committee.

Plans are progressing rapidly and the dance is sure to be a very great success.

RR

HONOR ROLL

The following students of the Home-making Department have successfully completed their work for the second quarter and are therefore placed on the honor roll.

High School Specials:

Helen Chase, Newburyport,
Emily Currier, Salisbury,
Ruth Peterson, Beverly,
Elizabeth Poland, Newburyport,
Priscilla Preston, Beverly.

Seniors:

Freda Peterson, Newbury,
Rita Pasquale, Lynn.

Juniors:

Barbara Clark, Lynn,
Evelyn Gould, Boxford,
Phyllis Marks, Lynn,
Yolanda Scamperino, Lawrence,
Lena Tela, Lawrence.

Freshmen:

Frances Carty, North Andover,
Dorothy Edmands, Saugus,
Stacia Grabowska, Danvers,
Mary Lafond, North Andover,
Madelyn Mathison, Methuen,
Ann McFadden, Malden,
Olive Purdy, Ipswich,
Eugenia Siddle, Methuen,
Margaret Spinney, Saugus,
Betty Walsh, Saugus,
Ella Wills, Ipswich.

RR

ESSAY CONTEST

An essay contest is being sponsored by the Public Speaking committee of the Future Farmers of America. The essay must be about agriculture, contain at least eight hundred words and be submitted before March 1st.

The prizes will be: 1st, four dollars; 2nd, three dollars; 3rd, two dollars; and 4th, one dollar.

V O'D

PERFECT ATTENDANCE

The following students have a perfect attendance record for the first half of the school year. An excused absence, indicated by an asterisk is for agricultural work approved by the school.

Seniors: *Andrew Bye, Richard Colby, Gordon Hall, Vincent O'Donnell, Charles Pettengill, **Lawrence Shanks, Ernest Tarbox, Woodward Walker.

Juniors: Bruce Bowden, Francis Gillen, Merle Graffam, **David Elwell, John Fullington, William Moore, James O'Neill, **Louis Rosi, Gildo Santin, Paul St. Linger.

Sophomores: Robert Bingham, Edward Cook, *Chester Clinch, Earl DeVeau, *Myron Eastwood, Rhea Gosselin, John Kukene, Charles Mahoney, Leroy MacAloney, **George Morrill, Clifford Nelson, *Fred Scribner, Frank Story, George Woundy, John Zielski.

Freshmen: Ralph Berrett, George Burkhart, Thomas Dederian, Milton Edmands, John Lynch, *John McDonough, Raymond Pead, *Joseph Ryan.

V O'D

F. F. A.

At the last meeting of the Future Farmers of America the following officers were nominated:

President:

Norbert White, Francis Gillen, Theodore Smolak.

Vice-President:

John Munroe, Allyn Trask, Gildo Santin, Joseph Lydon.

Secretary:

Walter Alley, Gilbert Freeman, Walter Hichens.

Treasurer:

Warren Towne, James Cashman, Percy Curtis.

Reporter:

John Marshall, James Keane.
The election will take place sometime in March.

The speaker in February at the general F. F. A. meeting was Chief Reeves of Swampscott who gave a shooting exhibition and talk.

NW

WRESTLING

For the last few years a large number of boys have been interested in forming a wrestling team but nothing, until recently, had been done about it.

Through the efforts of Archie Nimmo and Hollis Lufkin the boys have now formed a team and, for the last two months, have been coached by Mr. Couchig.

They recently went to Haverhill and lost to a more experienced team. Their next match, with a team of their own caliber (Lynn English), they won with a large margin. Their next match with Lynn Classical High should be an interesting one. A return match with Haverhill is scheduled, at which time the boys should make a better showing.

Members of the team are: Nimmo 127 pounds; Silva 122; Pohju 134; Lufkin 140; Camarra 145; Charles Clinch 155; Nelson 160; and Corneliusen 175.

NW

Credit

Farmers are now considering whether it will pay to borrow money in order to save money. A truck gardener came to my office recently and said he saved enough money to pay his expenses to the annual vegetable gardeners' association convention by borrowing and paying cash for his seed, fertilizers, and spray materials.

Where is the best place to buy credit? Certainly not from the dealer. He is not selling credit. He is selling commodities. Banks exist for the job of selling credit. Farmers' banks are now organized by farmers to supply credit to farmers who have sound enough plans and whose programs look as though the business would pay a profit and enable the borrower to repay the loan.

Types of Credit

Permanent: The Federal Loan Associations lend on real estate at 4 to 5% interest on terms from 10 to 40 years on mortgages secured by real estate and prepaid semi-annually.

Short-Time: The Lowell Production Credit Association, 9 Central St., Lowell, is a farmers' bank lending money for 3 or 4 months up to one year; interest at 5%. Security is generally personal property, cattle, equipment, etc.

Crop Loans: Congress has again provided for small loans to farmers who can not qualify in the Lowell Bank.

Rehabilitation: Those who can not get the above loans, who are now on the welfare or WPA but desire to get back into farming should apply to the agent of the Resettlement and Rehabilitation Unit, Extension Service, Concord, Massachusetts.

F. C. Smith,
County Agricultural Agent

Lowell Production Credit Grows

The annual report of the manager of the Lowell Production Credit Association shows a large but sound gain over 1934.

The total operating income for the year 1935 was \$6709.00 and expenses \$4246.00. This shows a gain or four times over 1934 net profit, or a profit of \$282.00 in 1934 and \$1397.00 in 1935. There has been set aside for reserves \$1132.00. The total loans in 1935 amounted to \$71,000.00.

F. C. Smith

Farmers' and Homemakers' Day Wednesday, March 18

GO (at) GETTERS

Since earliest times the goat has functioned continuously as the producer of Nature's finest and most perfect food for man.

Biblical history is replete with tales of ancient peoples and their dependence upon the goat for sustenance. From such old wisdom can we learn ways for new health.

Well-deserved is the position the goat has filled in reference to mankind; well-earned her often expressed title "The Foster Mother of Humanity." The physical evidence of years, manifested in those people relying on the goat for milk and cheese is more than substantiated in the findings of our modern day scientists and medical men.

In Switzerland, Norway, Sweden and Denmark, and hundreds of Asiatic communities the goat leads as the producer of milk and cheese. The health, the longevity, the mental alertness of these people is a matter of public knowledge.

In one country there has not been a case of tuberculosis in 100 years. In that country they live on goats' milk, nature's ideal food for old and young.

In the whirl of present day progress eating habits have become disorganized. Physical reserves are being exhausted. But health may be restored, and how easily, through the use of nature's most quickly assimilated food, through the use of a milk with an alkaline reaction, through the use of pure, delicious, goats' milk. When you consider the extra chemical properties that are found only in goats' milk it is easy to understand the reason for its beneficial action on the human body.

The substitution of goats' milk for the heavier and less easily digested foods, its daily use to the extent of a quart or more a day will soon have you feeling like a new person.

Try it and be convinced.

R. A. Thomas,
Essex County Goat Breeders' Assn.

Of Interest to Market Gardeners

A practical course in market gardening practices, which began on February 20, is being presented by members of the staff of the Waltham Field Station. The course is sponsored by the Boston Market Gardeners' Association. The registration fee is nominal, and the course includes a series of eight lectures on the following subjects: (1) The Business of Growing Vegetables in Massachusetts; (2) Vegetable Seeds and Varieties; (3) Soils; (4) Fertilizers; (5) Cultural Methods and Equipment; (6) Insects; (7) Diseases; (8) Raising Plants and Discussion of Production of Most Common Vegetables.

Application should be made to W. I. Locke, Treasurer, Boston Market Gardeners' Association, Waltham, Mass.

Classes will meet on Thursday evenings, (7:30 P. M.) at the Field Station, 240 Beaver St., Waltham.

DORA WINCHESTER

(Continued from page 1)

perience in growing and selling. She was then prepared to launch a roadside project which proved to be successful from the start.

Early in April, 1935, she leased a stand on the Lynn Fels Parkway and established herself in business. With the help of her father the stand was completely renovated and the surroundings were attractively planted. The early spring sales consisted of rock garden plants and seedlings raised in her own beds at home. During the summer months, fruits, vegetables and cut flowers from her own gardens found ready sales and her stand drew new customers daily.

During the Christmas season Dora was busy making wreaths, baskets and center pieces to meet the demand for these Christmas decorations.

From April to December this young graduate has been engaged in work in which she delights and which has given good returns for her labors.

Strawberry Yields — 1935

The following is a comparison of strawberry varieties and their yields at this School in 1935:

Variety	First Picking Dates	Last Picking Dates	Date and Amount of Largest Yield per 100 Plants	Total Yield from 100 Plants	Rate per Acre Based On 7260 Plants
Howard 17	6.14.35	7.1.35	6.26.35 16 Qts.	62½	4538
Catskill	6.19.35	7.5.35	6.27.35 36½ Qts.	113½	8222
Dorset	6.19.35	7.2.35	6.26.35 22 Qts.	43½	3176
Fairfax	6.19.35	7.5.35	6.26.35 27 Qts.	66½	4846

Black root was noticeably worse in Howard 17 variety than ever before. Soft rot destroyed considerable fruit of this variety.

The Catskills were of a large size and escaped rot.

Five quarts used for samples should be added to the Dorset yield.

The Fairfax variety was dark in color and had prominent seeds, two factors which detract from sale value.

C. O. Cartwright, Instructor in Small Fruits

Round About the County

Two groups in Hamilton and Marblehead are now studying furniture renovation and chair seating, cane and rush, with Mrs. Mary M. McIntire, Home Demonstration Agent.

Clothing classes are being held under Mrs. McIntire's supervision in the Gloucester and twice weekly at the Essex County Tuberculosis Sanatorium.

Mrs. Ruth D. Morley of the Massachusetts State College is conducting a course on Child Guidance in Danvers, Hathorne, Gloucester and East Danvers.

Mrs. Mary E. Roundy, R. N., and an instructor at this School, has classes in home nursing at Clifton, Salem, Hathorne and Peabody.

Forty-five members of the Salem Mothers' Club attended a meeting held in February when Mrs. Mary M. McIntire lectured on interior decoration.

Add Color To Fireplace On Winter Nights

Flames of red, blue, green, orange, or purple give fireplaces an added charm on winter evenings and can be produced with little trouble or expense, according to Robert B. Parmenter, extension forester of Massachusetts State College. Pine cones, treated with certain nitrates and chlorides, and tossed into the fire cause the flames to give out color.

Strontium nitrate gives red; barium nitrate gives blue; copper chloride produces green; calcium chloride produces an orange glow; and lithium chloride gives purple.

In treating the pine cones, the desired chemical is dissolved in a wooden tub or earthen crock in the proportion of one pound to one gallon of water. Metal containers cannot be used because of the effect of the chemicals.

The cones are then placed in a basket or porous bag and dipped into the solution. After they drain a bit, they are spread on paper and left to dry overnight. In the morning the cones are ready to be placed in red cheesecloth bags and hung near the fireplace. These bags of cones also make good presents for home-loving friends, Mr. Parmenter said.

Bees should be left in their packing cases until all danger from frost is over, and, to be on the safe side, one should not unpack average colonies until just before fruit bloom. Very strong colonies must be watched to prevent their swarming before they have been unpacked.

The site of the strawberry plantation should have a gentle slope so as to provide good water drainage, and also air drainage as a protection against frost at blossoming time.



4-H CLUB NEWS



Poultry Rally — February 29, 1936

Plans are all set for the biggest poultry rally we've ever had. Every boy and girl interested in Poultry should come. Don't miss it! Everyone is invited. There will be moving pictures and a real show on Mickey Mouse! An Egg Show with real prizes, a poultry judging contest and a basketball tournament. Be sure your club has a team all ready to play.

The Red Rooster Club of Saugus wins the banner for January with a score of 131.9 points. Crowell Star of Haverhill is a close second with 130.2 points. There are two ways of scoring for the banner this year; first, we take the percent of members reporting and add that to the percent of egg production for the entire club. This makes it possible for a club to score 200%.

The scores range as follows:

	% Reporting	% Production	Total
Red Roosters	75.	56.7	131.9
Crowell Star	86.6	43.6	130.2
Thrifty Egg Producers	63.6	45.7	109.3
Bartlett School Poultry Club	53.3	39.5	92.8
Haverhill's Best	66.6	21.5	88.1
Live Wire	27.2	58.8	86.
The Jolly 13	28.5	27.5	56.

Every club should have at least 100% for each member reporting.

	Average Hens	Eggs Laid	Eggs per Bird
BLUE RIBBONS			
Alton Page, Saugus	24	593	24.7
Arthur DesOrmeaux, Haverhill	32	744	23.2
Jack Blye, Haverhill	19	420	22.1
George Frost, Haverhill	28	623	22.
Paul Corson, Saugus	35	770	22.
Edward Mears, Essex	25	512	20.4

RED RIBBONS			
Neal Blake, Haverhill	100	1925	19.2
Kalope Makrogroulous, Haverhill	100	1904	19.
Tony Rizzotti, Haverhill	50	897	17.9
Ralph Pinn, Saugus	22	393	17.8
Edward Hyder, Haverhill	143	2460	17.2
Harold Sturtevant, Haverhill	20	333	16.8
Robert Kimball, Haverhill	11	172	15.6
Raymond Jenkins, Haverhill	50	772	15.4

YELLOW RIBBONS			
George Hazeltine, Haverhill	15	217	14.4
John Taylor, Haverhill	30	430	14.3
Alvin Duff, Haverhill	28	391	14.1
Robert Wilson, Haverhill	42	539	12.8
Algerd Ramaika, Haverhill	31	388	12.5
James Zatzos, Haverhill	19	232	12.2

Horace J. Shute, County Club Agent

Chick Growing Contest

Rules of the Massachusetts Chick Growing Contest, sponsored by the Massachusetts Federation of Poultry Associations, divide the contestants into two groups: A. the adult poultrymen of Massachusetts; B. 4-H Club members of Massachusetts.

The contest pertains to chicks (not less than 50) started anytime between December 1, 1935 and July 1, 1936.

Only chicks hatched in Massachusetts and from Massachusetts produced eggs are eligible.

A complete record covering the first eight weeks of brooding, along with a 300-word story on "Why It Pays to Buy Massachusetts Poultry" must reach the contest manager not later than four weeks after the chicks are eight weeks old.

Three competent judges will work with the contest manager in selecting the winners. These judges are:

Dr. F. A. Hayes, Massachusetts State College; Mr. John H. Vondell, Massachusetts State College; Mr. J.

Stop, Look, Listen

Be ye a Leader, Assistant Leader, Junior Leader, Committeeman, Service Club member or 5-year Club member. Everybody hold March 7 for the big 4-H banquet in honor of all 5-year Club members, and over, and at the same time a formal reception to the new Assistant 4-H Club Agent. It is now scheduled for March 7. Possibilities of a change. Tickets, will be out soon.

Stanley Bennett, Essex County Agricultural School, Hathorne.

Three prizes in each group will be awarded the winners:

4-H Club Group:

1st—200 chicks from an R. O. P. Breeder.

2nd—100 chicks from an R. O. P. Breeder.

3rd—50 chicks from an R. O. P. Breeder.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 17

HATHORNE, MASS., MARCH, 1936

NO. 3

Farmers' and Home-makers' Day

Inclemency of weather did not dampen the enthusiasm of 800 men and women whose attendance at Farmers' and Homemakers' Day on March 18 signified the lasting interest which this day holds for alert minded people.

Professor J. H. Frandsen's part in the morning program revealed to many the logical and beneficial uses to which surplus milk in this country might and should be put. Primary among these was that of cheese because of its palatability and high food value.

In the fruit section Professor F. D. Whitcomb of the Waltham Field Station revealed that a late dormant oil spray (3% oil) and pre-blossom spray (lime sulphur) are necessary for a serious infestation of European red mite. He emphasized the importance of the fact that liquid lime sulphur in pre-calyx and calyx sprays kills red mite 100% while sulphur dust kills but 20%.

It was also Professor Whitcomb's opinion that a second brood of leaf hopper should be controlled September first, by 3-4 of a pint of Black Leaf 40 to 100 gallons of water with 2 pounds of soap.

Professor George A. Potter of the University of New Hampshire divulged significant information on orchard management, recommending 50 pounds of dry hay mulch per tree in a sod mulch orchard. The amount of mulch should be the limiting factor for the number of trees to be planted or cared for.

Cyanamid is the cheapest source of nitrogen, which in turn, is the most important fertilizer element in the growth and development of apple trees. It should be applied as follows: (1) not more than 1 pound to an area of 100 square feet; (2) as soon as all the frost is out of the ground; (3) with smaller applications on light soils.

Professor Thies of the Massachusetts State College reported on orchard soil studies and apple tree root development.

Essex County Agricultural School

Homemaking and Agricultural Buildings



Goats

A section for those interested in milk goats was included in this year's program. Pictures depicting breeds, bulletins, and equipment for the goat breeder, and two five-day old Saanen kids comprised the exhibit which was a center of attraction throughout the day. Dr. Hugh F. Dailey of the Angell Memorial Hospital, Boston, spoke during the afternoon on the rearing and care of goats. The attendance and interest shown were in keeping with the increased demand for goats and goat's milk.

Poultry

Increasing interest was shown in the baby chick show this year. Harry Jenkins of Andover was sweepstakes winner for birds entered. All birds were auctioned off at the close of the poultry session.

With an eye to economic conditions Professor F. H. Branch, of the Massachusetts State College, told poultrymen that their business is on an up cycle. With good management and no undue expansion he prophesies that poultrymen will be favored this year with increasing profits.

Dairy

Dairymen witnessed a demonstration by Dr. Osman Babson, of the control of the milk-infecting disease mastitis. In addition, Professors J. H. Frandsen and H. G. Lindquist discussed the production of clean milk.

Gardening

Market gardeners were instructed by Professor G. B. Snyder as to the

(Continued on p. 4, col 2.)

Variable Vegetable Varieties

Although they will make the bulk of their plantings with "tried and true" varieties, alert gardeners are always on the watch for the "new"

variety of today that may be the one that most everyone will be planting in a year or two.

We may try the new offerings now with greater confidence than formerly because, since 1932, many of them have been subjected to an impar-

tial trial in all sections of the country before having received the "All America Award" for outstanding merit.

Many of the following varieties, now this year or within the past few years, have received this award and are worthy of testing on a small scale. These are:

Beans: green bush, round-podded, Tendergreen; bush lima, McCrea's. Beets: Asgrow Canner; Perfected Detroit.

Cabbage: Daybreak (early). Carrots: Tendersweet; Imperator; Morse's Bunching.

Celery: Golden Pascal.

Sweet Corn: Golden Coloney, a yellow Country Gentleman; yellow hybrids in order of maturity, Spangcross, Marcross, Whipcross, Golden Cross Bantam.

Cucumbers: Straight-8.

Lettuce: New York No. 515 (Iceberg type); White Boston Cornell No. 43.

Muskmelon: Honey Rock.

Parsley: Paramount.

Peas: Confidence; edible podded, Sugarstick.

Radishes: Comet; Glowing Ball; Firecracker.

Tomatoes: Penn State; Burpee's Globe.

A. L. Dacy,
Instructor in Vegetable Gardening

THURSDAY, APRIL 2, 1936
ATHLETIC BANQUET
AND DANCE

Essex Farmer and Homemaker

HATHORNE, MASS.
Published Monthly by the Trustees of
the Essex County Agricultural School

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Association
Secretary, R. H. Campbell Topsfield

Calendar

March 31—Staff Party.
April 2—Athletic banquet (homemaking building) and dance (agricultural hall).
April 3 and 4—Public Speaking contest sponsored by the Future Farmers of America, at Amherst.
April 4—4-H Club banquet for 5-year members and others (see article on page 4.) in homemaking building of this School.
April 17—Last of a series of meetings on Child Guidance with Mrs. Ruth D. Morley, at this School. 2 P. M. promptly.

Garden School

A garden school is offered to amateur gardeners and others interested, at the Massachusetts State College, between March 30 and April 5. The classes will be conducted by members of the Division of Horticulture. The course will consist of lectures and demonstrations starting at 8 in the morning and lasting until 5 in the evening with one hour for lunch.

APRIL 4 5-YEAR 4-H BANQUET

Honor Roll

For attaining scholastic achievement, the following students in the agricultural department have merited a place on the second term honor roll:

Seniors: *Lewis Norwood, Rockport; *Lawrence Shanks, Essex; *Albert Collins, Mildred Stewart, Danvers; James Goodale, *Charles Clinch, Middleton; *Vincent O'Donnell, Lynn; *Charles Pettengill, Haverhill; *Elmer Aldrich, Beverly; *Norman Wood, Amesbury; *Mildred Hills, Byfield; Arthur Glackin, Peabody; Gordon Hall, Andover.

Juniors: *Augustine Sheehy, Francis Gillen, Lawrence; Warren Kneeland, Rosario Richards, Salem; *Walter Alley, *James O'Neill, Lynn; *Paul St. Linger, *Gilbert Freeman, *Gildo Santin, Beverly; *Clayton Teague, Marblehead; *James Webber, *Walter Hichens, Louis Rosi, Middleton; John Fullington, Peabody; *Archie Nimmo, Methuen; *Henry Smolak, Theodore Smolak, North Andover; *Melville Low, Saugus; *Joseph Blunda, Ipswich; *Sargent Griffin, Gloucester.

Sophomores: *Albert Batchelder, Norman Peatman, Andover; *John Marshall, Danvers; Paul Day, Saugus; Myron Eastwood, Methuen; *John Munroe, Salem; Sheldon Robinson, Peabody.

2 X-Y-Z: *Rhea Gosselin, Haverhill; *Leavitt Moulton, *Edward Cook, *Howard Wilson, *Ernest Santin, Beverly; *John Natti, *Henry Alto, Gloucester; *Clifford Nelson, *Donald Nelson, *Walter Winn, Methuen; *Percy Curtis, *Jacob Ranta, Rockport; Warren Killam, Fielding Rogers, Danvers; *Gary Sano, *Sidney Johnston, Lynn; Leonard Duratti, Swampscott; *Leroy MacAloney, Groveland; *Allyn Trask, Peabody.

Freshmen: *William Corning, Peer Johnson, Beverly; *Nicholas DeLisio, *John Hocter, Peabody; *Paul Kelley, Lynn; *Conrad Nollett, Andover; *Howard Stone, Methuen.

* signifies that student was also on first term honor roll.

Alumni Notes

William Hay, class of 1932, is working on the poultry farm of graduate Norman Morgan ('25), in Andover. His home address is 42 Norris St., Lawrence.

Word has reached the School of the marriage on November 24, 1935, of Austin Basso, class of 1934, to Miss Rita Bibeau of South Lawrence. They are making their home in Georgetown.

On January 1, Miss Helen Newton, of Johnston, Colorado, became the bride of Roger Lewis, class of 1922. Mr. and Mrs. Lewis are residing at Sunnyridge Farm, Andover.

Miss Virginia Larrabee, class of 1934, recently employed by the Perry Seed Company of Boston, is now lo-

News of the School At a Glance

March 23

Student Charles Pettengill of Bradford whose exhibit at the Boston Flower Show was centered around the idea of maintaining beauty on the home grounds by adequate means of insect and disease control, won a silver medal.

An exhibit of antique farm implements entered by Instructor H. P. Thurlow of the School staff also won an award.

March 25

Mrs. Marion Rudkin of Beverly was enthusiastically welcomed jointly by the homemaking and agricultural departments of this School. The program was extended to the agricultural students by the sponsors, the Echo Club of the Homemaking School.

Spring Fashions

Whose morale will not be improved now that winter has disappeared, and with it, winter clothing?

Accessories are going to tell the fashion story this spring. This will be a season of little things. Plan your tailleur carefully, accordingly.

Before making purchases decide whether your costumes are to be based on one, two, or more colors.

The favorite spring color is gray, with navy a close second. Then come the ever sought-for black and brown with contrasting accessories in tan, white, beige, yellow, red, green, and chamois. Striking contrasts are black combined with white, gray with tan, brown with green, and navy with vivid coral.

Severe accessories should be confined to tailored suits and street clothes. Frills may be worn with "frocks."

Coming back is the old fashioned taffeta petticoat. The joy of rustling again!

Hand bags are ultra smart: large and roomy (an interesting note for us females who carry the contents of a suitcase in a small purse).

Let us not forget the hosiery. Stockings are becoming glamorous in color.

Who is not glad that spring has arrived?

M. M. McIntire,
Home Demonstration Agent

cated with Fraser the Florist, in Wellesley. Miss Larrabee has been placed in charge of a new department recently added to Mr. Fraser's large establishment, through which experimental work with seeds will be carried on.

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

MARCH, 1936

STUDENT EDITORS

Homemaking Department

Helen Chase, Newburyport
High School Special
Florence Hirst, Methuen Senior
Josephine Hogan, Swampscott Senior
Ruth Riley, Lawrence
High School Special

Agricultural Department

Leonard Duratti, Swampscott
Sophomore
Norbert White, Lynn Junior
Vincent O'Donnell, Lynn Senior
John Marshall, Danvers Sophomore
Walter Hichens, Middleton Junior

SPORTS' REVIEW

The sports' season has again closed at Essex Aggie, all teams having been quite successful in their respective fields.

The basketball team had one of the most difficult schedules in the history of the school and it is a credit to them that they were so highly successful. The boys played 20 games, and of these, twelve were victories. Our team made 513 points against 461 of the opponents. The high scorers were Lewis Norwood and Stanley Bickford, their scores for the season being 154 and 96 respectively.

Wrestling was again started after being dormant for two years. Members of the team had little time for practice but they were game and had plenty of fight. In every match they competed with more experienced men than themselves. However they were victorious in one out of four matches. Next year with more experienced men, we expect to see a wrestling club that will be something with which to contend.

A fitting conclusion to a successful year is the athletic banquet and dance which will be held on April 2nd. Everyone is going — and everyone is going to have a good time. NW

F. F. A. ELECTIONS

At the F. F. A. election held on March 12, the following officers were chosen for 1936-37:

President: Norbert White, Lynn
Vice-President: Joseph Lydon, Nahant
Secretary: Gilbert Freeman, Beverly
Treasurers: James Cashman, Peabody
Warren Towne, Beverly
Percy Curtis, Jr., Gloucester
Reporter: James Keane, Nahant
Executive Committee:

William Hayes, Swampscott
Chester Clinch, Middleton
William Corning, Beverly

ESSAY CONTEST

The winners of the essay contest will be printed in the next issue of this "Supplement."

The essays submitted were:

"Outlook for Rural Youth"

by Augustine Sheehy.

"Production of Clean Milk"

by Joseph Lydon

"Roses"

by Leonard Duratti

"Cyclamen Growing" by Richard Colby

JK

PUBLIC SPEAKING

At the county school elimination contest in public speaking held at this school on March 9th, student Ashley of Bristol County Agricultural School placed first with a talk on "Reforestation."

Charles Mahoney of Essex placed second with the topic, "Selecting a Farm."

Third place went to student Foster of Bristol who talked on "Horses and Mules."

William Corning of Essex was chosen first alternate. JM

MANUFACTURE OF CHOCOLATES

At an assembly in the homemaking department on March 12, a representative of the Schrafft chocolate factory presented a moving picture depicting the manufacture of chocolates and other candies.

This particular factory has a floor space which is sufficiently ample to allow for the manufacture of several hundreds of pounds of candy daily.

In the manufacture of chocolates the air inside a factory should be controlled regardless of outside temperature and humidity. This insures prompt shipment of fresh candy at all times.

Workers in factories should be physically examined.

It was interesting to learn that chocolate is made from the cocoa bean which is obtained from several sources in order to get the desired blend. Raw chocolate and sugar are packed in large kegs until used, and both must be refined.

The pictures showed a line of workmen filling boxes of candy. As the box passed the workers each person put in a different kind of candy. These workers are experts.

The candy, which is started on the top floor, is automatically sent to the floor below as each process takes place, and when it reaches the street floor it is packed and made ready to be shipped.

The pictures were enjoyed by the girls and the two samples of chocolate given to each member of the audience most welcomed. H.C.

ALUMNI NOTES

Eric Peterson, class of 1934, is working in Lexington with Richard Murray, '23, the auctioneer.

Roy Newhall, class of 1926, is employed in Government inspection work in Farmington, Maine.

A son was born in January to Mr. and Mrs. William Connors (Eva Belcher, class of 1931).

Dora Winchester, class of 1934, a recent visitor at the School on Farmers' and Homemakers' Day, is making plans for the re-opening of her roadside stand in Saugus.

RADIO PROGRAMS

The following programs are being printed for the special interest of consumers:

Tuesdays at 4:45 P. M. on Sta. WEEI: General Federation of Women's Clubs. Radio Chairman interviewing official from U. S. Department of Agriculture.

Tuesdays and Thursdays at 10:45 A. M. on Station WCOP: Middlesex County Consumers' Council. Information on textiles, clothing, etc.

Fridays at 2:30 P. M. on station WAAB (Yankee Network): Consumers' Councils of Massachusetts. Speakers on a variety of consumer problems.

Saturdays at 5:15 P. M. on sta. WNAC (Yankee Network): Better Boston Business Bureau. Dramatized presentations of fraudulent and unscrupulous practices. Amusing, informative.

Daily except Saturdays at 12:25 P. M.: Suffolk County Consumers' Council, the Consumers' Guide.

Timely Tips on foods and marketing.

COTTAGE CHEESE

Professor J. H. Frandsen of the Massachusetts State College, the main speaker on our recent Farmers' and Homemakers' Day program, gives the following simple recipe for the making of cottage cheese:

Allow the skim or whole milk to stand at a temperature of 70 to 80 degrees Fahrenheit to sour until it curdles. Then warm it to 110 to 120 degrees F. by placing it in a pail of warm water on the rear of the range. Leave the curd in hot whey for about 15 minutes. Then pour the curd, without breaking more than necessary, into a cheese-cloth bag or onto a piece of muslin. Drain until no more whey appears. Season to taste with cream and salt.

By regulating the time and temperature, one can produce cheese of desired consistency. The higher the temperature to which the curd is heated, or the longer the curd remains in the hot whey, the harder and dryer the cheese will be.

A cottage cheese recipe which has found favor among homemakers and which has generously been supplied by Miss May E. Foley, State Nutrition Specialist, is called cottage cheese? custard, and follows:

1 cup cottage cheese

1/2 cup sugar

2 3 cup sweet milk

2 eggs

1 tablespoon melted butter

1/4 teaspoon salt

1 teaspoon vanilla

Beat the eggs, add sugar and milk, mix cottage cheese, salt, butter and vanilla. Bake in custard cups set in a pan of hot water, in a slow oven, 45 minutes.

SUMMER PROJECTS

About twenty-five students have already left for summer project work. This exodus will continue until the last of April when sessions close in the agricultural department. It is a remarkable thing to see that in these times of unemployment a high percentage of students have secured work with well-known agricultural firms throughout the county. The project season is a time when we are able to put into practice those things taught in the classroom. We are able to learn and earn. Students who do not secure work at first should try again.

"Learning to do
Doing to learn
Earning to live
Living to serve."

JK

JUNIOR PROM

The annual promenade of the class of 1937 was held in the assembly hall of the agricultural building on March 6th. Picturesque settings and elaborate decorations prepared the stage for the harmonious Lewis' Moonlight Hawaiians whose melodies were enjoyed by all.

The elimination dance was won by Warren Kneeland, '37, of Salem and his partner, Barbara Stickney, and the spot dance was won by Allen Towne and Pauline Whittaker. One of the highlights was the Grand March led by Joseph Lydon (President of the Junior class) and Beverly Bird, Vice-President. Favors were given out and a most pleasant time was had by all.

JK

GREEN AND WHITE

The March edition of the "Green and White" has just recently been published. This magazine, the largest ever undertaken by the students, has an attractive dark cover with silver print.

Fourteen pages of this issue are dedicated to Senior pictures and write ups. Besides numerous essays and stories there are group pictures which include the basketball and wrestling teams, executive committee of the Future Farmers of America, and the Echo Club.

The ever-revealing article, the popularity contest, proved to be a hit.

Edward Bessom is the editor of the magazine and Phyllis Marks and Walter Hichens, assistant editors. Following are the additional members of the editorial staff: Sports: Kay Johnson and Lewis Norwood; F. F. A.: Joseph Lydon; Alumni: Florence Woodbury and James Keane; Exchange: Ruth Peterson and James Cashman; Art: Stacia Grabowska and Joseph Blunda; Jokes, Elinor Senior and Albert Collins; Echo Club: Lelia Moore; Senior Editor: D. Woodward Walker; Business Managers: Amelia Tataronis, Henrietta Stockley, Kenneth White, Francis Gillen, and Elmer Luxton.

The faculty advisers are: Miss Verna Clarke, Miss Ruth Emerson, George E. Gifford, and Carleton M. Stearns.

V O'D

EVELYN RICHARDS

Evelyn Richards, class of 1930, has found that persistence wins its reward. During her work in this School she majored in foods and was especially interested in dietetics, so much so that she was determined to continue study in that particular field.

Because she lacked the necessary funds to carry her through another school, she worked until she had sufficient funds to carry her through the Boston School of Domestic Science. Her apprenticeship, served in the J. B. Thomas Hospital in Peabody, completed her training, and she graduated with an excellent record.

The school placed her in the children's Hospital in Philadelphia. After she had been there only one month they received a call for assistant dietician in the Frankford Hospital, also in Philadelphia.

Because her work had been so satisfactory she was chosen for the position of the head dietician in this hospital of 150 beds. Evelyn has full charge of the diet kitchen. She has been there two months and is most happy in her work.

FH

HAPPINESS

After Alice Freeman Palmer had retired as first President of Wellesley College, she used to go to Boston and hold classes and talk to the little girls in the poorer sections. Most of these children had to look after baby brothers and sisters during the day while their parents worked. One day she asked a group, "What shall I talk about today?" One little girl replied, "Tell us how to be happy."

Mrs. Palmer emphasized three things as essential:

1. Learn something lovely, worthwhile, each day.
2. Look for something beautiful each day.
3. DO something nice for someone each day.

BEAUTY HINTS

At an assembly held on Wednesday, March 11, Miss Dora Rogers of a neighboring beauty salon, gave an interesting talk and demonstration on the care of the face and hair. Miss Rogers demonstrated on two of the girls, giving Evelyn Howard a haircut and wave, and waving Anne MacFadden's hair. Afterward Miss Rogers demonstrated on Anne MacFadden the proper way to apply make-up.

Miss Rogers stressed the fact that in order to have beauty, one must be healthy. If a person is healthy she is really beautiful. All health grows from within. Nervousness, poor circulation, excessive smoking, insufficient milk and not enough sleep are the principal causes of poor and sallow complexions and dull lusterless hair. Miss Rogers went on to say that soap and water are not enough for cleansing the face,— that we should use cream. Miss Rogers gave an excellent remedy for poor complexion. First cleanse the face with castile soap and warm water. Then take a wet pad of cotton spread with cold cream and common table salt and apply it to the face with a rotary motion, up and out.

Tea and coffee, while harmless, do not do us any good. Being out of doors and taking plenty of exercise, together with plenty of water daily will give one a good complexion.

In regard to the care of the hair, Miss Rogers stressed the importance of brushing the hair every morning and night. The correct way is to brush the hair up from the back to the top of the head and from side to top. The scalp should be massaged with the fingertips. Hair can be trained if it is waved nightly. If done faithfully every night, in four or five years you will have a natural wave. A hard cake soap should never be used on the hair. Always use a liquid shampoo. Using cake soap may cause dandruff. To get rid of dandruff rub in warm oil on the scalp and brush the hair well. Massaging the scalp helps to bring back the glands to action.

The talk and demonstration that we hope we will be fortunate enough to have Miss Rogers speak to us again.

RR

BREVITIES

Charles Mahoney of Lawrence, and William Corning of Beverly, winners in the recent speaking contest at this School, gave their talks before the Beverly Grange on March 2nd. Student Mahoney also spoke before the I.O.O.F. of Danvers on March 17th.

Farmers' and Homemakers' Day always brings back a number of enthusiastic alumni. Among those present on the 18th, were Charles Gardner Caverly of Ipswich; Carleton Symmes of Saugus; David Fisher of Saugus; Ernest Thayer of Lynn; Dora Winchester of Saugus; Harry Green, Rockport; Mr. and Mrs. Ralph Broughton of Danvers; and Lucille Legasse of Haverhill.

Willard Early of Salem, class of 1934, owner of Early's Radio Shop in Salem, exhibited on Farmers' Day and furnished the amplifying system used in the main hall.

Charles Pettengill of Bradford exhibited at the Boston Flower Show during the week of March 22.

The annual meeting of the Massachusetts Association of the Future Farmers of America scheduled for March 20 and 21 at Amherst was postponed until a later date because of flood conditions in the Connecticut valley.

FUTURE FARMERS OF AMERICA

The following students were accepted as County Farmers, and awarded a County Farmer pin, on March 11, 1936:

D. Woodward Walker, Salem
Fred Scribner, Topsfield
Joseph Lydon, Nahant
Merle Graffam, Lynn
Palmer Jones, Salem
David Elwell, Essex
Elmer Luxton, Wenham
Norman Peatman, Andover
John Marshall, Danvers
Walter Hichens, Middleton
Francis Gillen, Lawrence
Myron Eastwood, Methuen
Warren Towne, Beverly
Norbert White, Lynn, and
Sidney Batchelder, Andover.

The following County Farmers are seeking the State Farmer grade: Kenneth White, Salem; Merle Graffam, Lynn; D. Woodward Walker, Salem; Ernest Tarbox, Saugus; Charles Clinch, Jr., Middleton; Gilbert Freeman, Beverly; and Gildo Santin, Beverly.

LN

Garden Chat

Granular cyanamid will kill off one-inch weeds in an asparagus bed and ward off a large labor bill which other means of control might involve. It is most important to observe, however, that after the weeds have outgrown the tender stage an application of cyanamid would only tend to furnish them with plant food and cause their rapid growth.

Cyanamid, applied to small weeds, in quantities of 300 pounds per acre, has been used successfully at the School market garden. Nitrogen (21%) and 70% hydrated lime have also been added to the soil to benefit the asparagus.

Note: Disastrous results from burning have been recognized when cyanamid has been used on crops other than asparagus. Cyanamid may be used as a food for plants if applied several weeks ahead of planting.

Damping-off

Seeding time is here for early-sown seed in hotbeds or greenhouses. Last year were you troubled with little seedlings dying off right at the surface of the soil? If this serious disease, known as Damping-off, did attack your plants, why not take precautions to guard against it this year? Send to the Massachusetts State College at Amherst or to this School for bulletin No. 116, "Control Calendar for Vegetable Pests." It will give you specific details in the control of damping-off as well as of all other vegetable pests.

Fertilizer

If you are a grower of several acres of crops and use several tons of fertilizers per year it might pay you to mix your own 5-8-7 fertilizer this season. In most cases prices of ingredients are less this year than they were a year ago. If, upon talking with your fertilizer salesman, you find it would pay you to mix your own, be sure to add the correct proportions of each ingredient to make a balanced fertilizer and to receive proper results.

Word to the Wise

Now is the time to oil, repair, and replace disabled tools. A new season has arrived.

C. M. Stearns,
Instructor in Market Gardening

Milk Control Law

On March 11, at a hearing before the committees on Agriculture and Public Health (sitting jointly), the Milk Control Law, Senate Bill No. 346, was under discussion.

Members of the Federation recorded themselves unanimously in favor of the prolongation of this bill.

Poultry House Ventilation

During the period from December 1, 1935, to March 1, 1936, the poultry department of this School has been cooperating with the Massachusetts State College in a poultry ventilation project.

The objectives of this project have been to control temperature and humidity variations within the poultry houses as far as possible by ventilation adjustments, to keep litter as clean and dry as possible, to lower mortality and increase or maintain uniform egg production.

Temperatures were taken three times daily in three houses and out of doors by wet and dry thermometers. A sling psychrometer was provided for this purpose.

The wind direction and velocity was recorded three times daily and draft indicators designated drafts or movements of air inside the houses. Several times during the course of the project, smoke tests with bee smokers were made to determine the circulation of air.

Summary of Observations

Size of houses	House No. 1 12'x20'	House No. 2 20'x20'	House No. 3 20'x12'
Glass window area	1/25 of floor space	1/22 of floor space	wire partition 1/11 of floor space
Cloth curtains (tight)	1/10 of floor space	1/13 of floor space	1/16 of floor space
Average daily temperature	33.3°F.	34.8°F.	39.2°F.
Maximum temperature	58.0°F.	59.0°F.	59.0°F.
Minimum temperature	6.0°F.	10.5°F.	19.0°F.
Average relative distance cloth curtains were lowered daily	18"	12"	6"
Average relative humidity	72.1%	73.9%	76.4%
Number birds December 1	43	101	185
Egg production	53.5%	48.85%	53.8%
Mortality	2.3%	.98%	7.02%
Culled or rejected as breeders	30.2%	16.5%	15.2%
Hatching data	73%	none	69%
Average daily outside temperature December, January, February:	24.4°F.		
Average daily outside relative humidity Dec., January February:	61.8%		
Maximum outside temperature:	52°F.		
Minimum outside temperature:	-4°F.		

Conclusions

In house 1 the cloth curtains were fully opened on all sunny days unless winds caused the birds to huddle. The windows were on the side and admitted very little sun. The ceiling was insulated with a composition board and showed no condensation under the most trying conditions. The single wooden floor was raised above the ground approximately one foot and the litter was frozen and damp much of the winter but was not changed. The egg production was apparently not affected by housing but as these birds were February hatched some individuals neck-molted.

In house 2, the floor was double matched boards with building paper between floors and raised above the ground over two feet. The house was not insulated and condensation occurred on the ceiling, floor, walls and windows. This flock was late-hatcher and the low average egg production was due also to infectious colds in December. The litter was changed once, December 27.

Ventilation was restricted in house 3. The temperature and relative humidity averaged higher than in the

other houses, and the egg production highest. The increased mortality was apparently due to lower vigor. The litter was not changed but kept in the best condition. The concrete floor was practically free from condensation. The roof and windows were damp or frosted most of the time.

It will be observed that insulation should prevent such dampness caused from condensation on ceilings and walls. The space below pens with wooden floors should be closed-in to prevent condensation and damp and frozen litter.

A water system that would prevent birds from throwing and wetting litter should be very helpful.

While well bred birds with good vigor will apparently tolerate considerable dampness and low temperatures, insulation, properly constructed concrete floors and a well-designed water system should pay dividends in reducing the cost of litter, produce cleaner eggs of higher quality, and allow the poultryman to take more pride in the condition of his plant.

J. E. Miltimore,
Instructor in Poultry

Round About the County

In Prospect

Arnold M. Davis, horticulturist, of the Massachusetts State College, is planning to bring a course of six lectures to Essex County this spring. Those communities interested in this series are requested to notify Mrs. Mary M. McIntire, Hathorne.

Continuing

Spring clothing classes are continuing in Lynn at the Young Women's Home, as well as in Amesbury, Salisbury, and at the Essex County Sanitarium, Middleton, with Mrs. Mary M. McIntire, instructor.

Interior Decoration

The third meeting of the study group in Interior Decoration, organized by Mrs. Alfred Shatswell, will be held in the Cleveland Room of the Unitarian Church, Salem, on Wednesday, April 23, at 2 P. M. The specific subject under discussion will be announced.

Furniture Renovation

Mrs. Mary M. McIntire is conducting classes in furniture renovation in Haverhill, Marblehead and at the Essex County Sanitarium.

Home Nursing

Home nursing classes supervised by Mrs. Mary E. Roundy, R. N., are continuing at the Salem Hospital, the Horace Mann School, Salem, in Peabody and in Danvers. As each of the groups completes the course it is extended an invitation by Superintendent Oliver Pratt of the Salem Hospital to inspect that institution.

Concluding

Mrs. Ruth D. Morley, specialist of the Massachusetts State College, will conclude, on April 17, a series of meetings held in Danvers and at this School, on the subject of child guidance.

5 Year Banquet

Saturday, April 4th at 6.30 P. M. will be another big event in the 4-H club program for 1936. On that day we will honor all club members who have reached the halfway mark on the road to clubdom.

The Essex County Service Club is sponsoring the first 4-H banquet at the Aggie School in honor of all five-year club members.

A real live program, different from all other club programs, will be put on. Mr. George L. Farley, the state 4-H club leader, will address the five-year members along with other state and county leaders. Mr. Lee Johnson of the Bristol County Service Club will bring us a message from his club. An evening of entertainment is planned to follow the banquet.

Service Club members, former club members, and local leaders and parents are invited to attend this banquet.

Crop and Feed Loans

On March 7 there was printed a set of regulations relative to emergency crop and feed loans in the United States made pursuant to the Emergency Relief Appropriation Act of 1935, approved April 8, 1935, and executive order No. 7305 dated February 23, 1936.

In brief, loans will be made by the Governor of the Farm Credit Administration to farmers in the continental United States for fallowing, for the production of crops, for planting, cultivating and harvesting crops, for supplies incident to and necessary for these items, and for the growing feed for livestock.

Such loans will be limited to the amount necessary to meet the immediate and actual cash needs.

Applicants must agree (1) to use seed and methods approved by the Department of Agriculture, (2) to plant a garden for home use, and (3) to plant a sufficient acreage of feed crops to supply feed for their workstock and subsistence cattle.

For detailed information, applicants for loans in Essex County, should communicate with the County Agent F. C. Smith, Hathorne.

FARMERS' AND HOMEMAKERS' DAY

(Continued from p. 1.)

ways in which our crops are affected by those of the Middle Atlantic States and Connecticut. Professor Whitcomb referred to new insecticides for the vegetable gardener.

Desirable perennials and their handling were enumerated for those interested in floriculture by Professor George Graves of the Waltham Field Station, and a round table discussion was later led by Instructors H. L. White and H. C. Stevens of this School.

Homemaking Department

Women not only filled the auditorium in the homemaking department but were seated in the hallways to hear the messages of Mrs. Louisa P. Skilton, Household Editor of the American Cookery magazine and assistant director of the Home Information Center at the Jordan Marsh Company, Boston, and Mrs. Ada Danforth of the Suffolk County Consumers' League.

The exhibits in both departments were noteworthy and instructive.

THURSDAY, APRIL 2, 1936

ATHLETIC BANQUET AND DANCE

SATURDAY, APRIL 4, 1936

5-YEAR, 4-H BANQUET

4-H Club Assistant Appointed

Miss Bisbee Holds Office

Essex County Club folks, especially the girls, are rejoicing over the appointment of an assistant county club agent made possible by a vote of the trustees of the Essex County Agricultural School.

Miss Vera A. Bisbee of Saugus was chosen from the list of candidates to fill this position. Miss Bisbee is a graduate of Framingham State Teachers' College and comes to us with excellent training and background. In addition to her high scholastic training Miss Bisbee has the advantage of having been associated with youth organizations.

She will assist Mr. Shute by taking charge of all girls' club work in Essex county, including clothing, foods, canning, and home-furnishing clubs.

This addition to our 4-H Club department will aid Club work in the county by giving more time to leader training meetings. Thus a more complete and well-rounded program for the club will be developed.

Club work has grown in this County from nine hundred members to nearly 1500 in the past few years. The prediction of over 1800 local members this year calls for a greater demand for leaders. These leaders must be trained and aided with their programs. It is therefore most fitting that an assistant be appointed at this time, especially one who can step into this position and serve the clubs immediately. Much credit for this appointment is due the local leaders' association of this county.

Miss Bisbee started work March first. As soon as she has become acquainted with all the leaders she will be even better able to carry on the 4-H Club program.

H. J. Shute

Tent Caterpillars

I believe that we all owe to the 4-H Clubs, the boys' clubs, the Boy Scouts, the Girl Scouts, and the garden clubs, a decided vote of thanks for their efforts in attempting to curb the ravages of the tent caterpillars. This is an example which can well be followed not only by 4-H clubs but by home-owners and people in a position to spend, if no other time, a Sunday afternoon cutting some of these miserable nests and egg masses when they first start to form.

I congratulate the 4-H clubs for their undertaking and also the garden clubs which perhaps inaugurated this campaign two years ago.

A. M. Davis,
Massachusetts State College

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 17

HATHORNE, MASS., APRIL, 1936

NO. 4

Is the Herb Garden

A Fad?

We have noticed the last few years a revival of interest in the growing of herbs both as a source of pleasure and of profit. For a period of years we have lost track of some of the herbs in our backyard gardens. Apparently little attention was paid to them until garden lovers resurrected them again. Is it a fad or will herbs be a permanent feature in the garden hereafter?

During the last three years I have done some investigating at the school both from outside sources and also from an experimental garden conducted on the School farm. It seems to me that herbs have desirable qualities which should make them a permanent part of our gardens. Although some of the herbs are not attractive ornamentally yet such herbs as Borage, the Thymes, Lemon Balm, Rue, Bee Balm, Southernwood, Ambrosia Santolina, and many others would add variety and fragrance to the flower garden. And it would be convenient and interesting to step out in the garden and pick a handful of Mint, Sage, Lemon Balm, or Basil to add zest to our ordinary foods. And why not rely on our gardens for those healing herbs, Yarrow, Prunella, Borage, and Wormwood?

Over a million dollars worth of herbs are imported to this country from Europe each year to supply the needs of our trade. As many of the herbs are not difficult to grow it seems that farmers could provide themselves with an income.

Seed of the common herbs may be obtained from several of the popular seed houses. Many nurserymen are selling herb seedlings in season.

A. E. Perkins,
Instructor in Science

School Cafeteria

Not in an old-fashioned way is the School kitchen managed. Equipped with such modern appliances as electric vegetable peelers and washing machines, and mechanical bread and meat slicers, it is scientifically con-



ducted under the supervision of Mrs. Harriet M. Butman, Foods Instructor.

Two groups of Junior girls meet twice weekly to prepare large quantity recipes (for fifty), applying the theory previously studied in the class room.

High School students devote half of their school year to cafeteria practices.

It is the privilege of each Junior girl to plan and supervise the preparation of a cafeteria luncheon one day during the last half of the year.

Luncheons prepared by the students are served in the School Cafeteria every noon to students in the agricultural and homemaking departments.

Spring Salads

Now that spring is here there is the desire for a change in our diets, our spring salads are always tempting. Fruits and vegetables are much more plentiful now and are also very inexpensive. Why not use them?

Raw spinach used in the place of lettuce in salads or sandwiches is a very tempting variation, and economical right now.

For a new salad, try this: On a bed of lettuce place a whole half pear, cut-side up. Place cut straw-

(Continued on page 3, col. 2)

Warning to Raspberry

Growers

A word of warning to home growers as well as commercial growers of raspberries is being given by authorities in western Massachusetts which will benefit Essex County growers as well. They are cautioned to make an extra effort to prune out and burn all weak, dead, and diseased canes now, because of the prevalence of cane diseases last summer and fall.

Infected old canes furnish the fungous spores for the new shoots that come out later this spring. Following this cleanup, a delayed dormant spray of lime-sulphur - 0 will disinfect the healthy canes and prevent to a considerable extent the discharge of spores from the lightly diseased canes that are not cut out.

Cane diseases such as Anthracnose, Cane Blight, and Spur Blight were more prevalent last summer and fall than for many seasons past. Where these diseases were unusually bothersome last year, a second or pre-blossom spray of Bordeaux 3-5-50 or lime sulphur 1-50 is advised. This should be applied one or two weeks before the blossoms open to guard against those spores that escape the first spray.

Origin of Handkerchiefs

Did you know that the first handkerchief was a jackal's tail mounted on a stick? These handkerchiefs were used by the Bushman in primitive times, and served the double purpose of handkerchief and fan. Other savage races wove little mats of rushes to wear on their heads and used them to mop away the perspiration from their foreheads.

The Greeks and Romans had handkerchiefs of small squares of linen

(Continued on page 3, col. 3)

JUNE 6

4-II CONTENT DAY

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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Calendar

April 24—Agricultural Department of this School closed for project season.

May 1—Miss Grace B. Gerard in Peabody (see Round About the County, page 4.)

May 9—Massachusetts Vocational Association meeting in Worcester.

May 29—Meeting of the Salem Mother's Club with Mrs. Mary M. McTire speaker. Subject: Wallpaper.

June 22 and 23—Open dates for lectures on herb gardens by A. M. Davis of the Massachusetts State College.

Public Speaking

Annually a State Vocational Agricultural Speaking Contest is held in Massachusetts. Students of agricultural schools and departments of high schools participate, delivering speeches prepared by themselves and dealing with agricultural problems.

This year's contest was held April 10, at Amherst. The following students competed:

John Rosati of Agawam, speaking on "The True Situation on American Farms."

Raino Lanson of Worcester, discussing "The Need of a Cheaper Source of Electricity in Agriculture."

Charles Mahoney of the Essex County Agricultural School, who dealt with "Locating a Farm."

Arthur Tripp of Westport, whose subject was "Why Be a Farmer?"

Roland Ashley of Bristol County

News of the School At A Glance

April 10

Gordon Hall of Ballardvale was high individual in the April poultry judging contest at Amherst. His combined scores in this and a previous contest make him eligible for the finals in Topsfield when the state team will be selected. Student Hall is a member of the Senior class and will be employed on the School poultry plant during the summer.

Refinishing of Furniture

How we all enjoy digging down into Mother Earth, depositing a few seeds and nourishment, and looking forward to seeing something beautiful for the garden.

In like manner we revel in scraping down through the ugly, rough, stained surface of a cast-off piece of furniture, smoothing it, depositing stain, varnish, shellac or paint, and behold a thing of beauty for the home!

Let us watch the transformation of a badly marred kitchen stool, one we wish to hide beneath the table. The surface is removed by drawing a clean cut piece of glass along with the grain of the wood. It is smoothed to a satin-like texture with a fine piece of sand paper. An oil stain is then applied to the stool and wiped off according to the shade desired. After being thoroughly dried, the surface is lightly rubbed again with fine sandpaper. The varnish is then applied, allowed to dry and rubbed lightly with a small piece of oil-dipped steel wool, or an oiled worn piece of fine sandpaper. After rubbing with a soft, dry cloth, we are just as happy to show our kitchen stool as that first fragrant sweet pea in the garden!

The two freshmen divisions in the homemaking department of this School have been spending one and one-half hours each week during the third quarter, refinishing stools, tables, chairs and a bureau.

Harriet M. Butman,
Instructor in Household Arts

Agricultural School, discussing "Deforested America."

Herbert Berg of Worcester, speaking on "Taxation and the Farmer."

Wellington Clary of Smith's Agricultural School, dealing with "The Evolution of the Hen and Her Place in Modern Agriculture."

Vincent Foster, of Bristol County Agricultural School, speaking on the subject "Horses and Mules Bring Back Prosperity."

Four prizes ranging from \$20 to \$50.00 were awarded to the following speakers respectively: Roland Ashley, Vincent Foster, Charles Mahoney, and Wellington Clary.

Out-Wit the Moth

April finds us ready to put away our winter garments as we don our spring apparel. Let us remember that the condition in which we shall find these same garments next October depends on the treatment that they are given now. No garment should be put away until it has been cleaned or at least well sunned and aired. Remember moths attack soiled garments more readily than clean ones. If all missing buttons are replaced and small repairs made the owner will have the satisfaction of knowing that the garment will be ready to wear at a moment's notice when autumn winds begin to blow.

There are many mothicides on the market. The United States Department of Agriculture recommends crystals of paradichlorobenzene which may be purchased from your drug-gist under that name or under several trade names. To insure against moth invasion after storage, and to prevent loss of fumes if a mothicide is used, gum paper tape, the kind used by grocers, may be pasted over the cracks of the storage container.

Since summer temperatures dry out the natural oil of furs, causing drying and falling of hairs and stiffening of the pelt it is advisable to put fur coats or heavily furred cloth coats in cold storage. It is well to have the fur cleaned and minor repairs made before storing. However, if extensive alterations are planned they should be left until fall to see what the fashion trends will be.

Remember, cutting your winter garments for rug rugs because they are too moth-eaten for further wear, makes rug rugs expensive.

Constance Lovett,
Instructor in Sciences

NYA Project

In less than two months the National Youth Administration of the 4-H clubs in Essex County has organized 70 clubs with a total enrollment of 1200 members. The clubs extend from Rockport to Methuen.

This 4-H program is a Federal project which employs assistant recreation leaders and guides.

Proof of the value of this organization is contained in the weekly reports of Horace J. Shute, 4-H Club Agent, who lists among the accomplishments: necktie racks, book racks, aprons, broom-holders, and many other articles of practical use.

Under the supervision of Alfred J. Cipolla, garden clubs have been created, and with his guidance gardens will be planted and cared for.

4-H members are urged to take advantage of the advice and instruction made possible by this project. Leaders will be equally glad to assist anyone, whether a member of 4-H clubs or not.

A. J. Cipolla

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

APRIL, 1936

STUDENT EDITORS

Homemaking Department

Helen Chase, Newburyport
 High School Special
 Florence Hirst, Methuen Senior
 Phyllis Thompson, Saugus Senior
 Ruth Riley, Lawrence
 High School Special

Agricultural Department

Leonard Duratti, Swampscott
 Sophomore
 John Marshall, Danvers Sophomore
 Sidney Johnston, Lynn 2X-Y Z
 James Cashman, Peabody Junior
 James Keane, Nahant Junior
 Lewis Norwood, Rockport Senior

ALUMNI NOTES

Alce and Tom Swiniarski of West Peabody are employed on Mrs. Fisher's poultry farm.

Nick Fiore, class of 1935, is working in Swampscott with his father doing landscape work.

William Daly, class of '35, is delivering mail for Uncle Sam in Peabody.

George Bulgaris, class of '32, is now employed at the Kelsey Highland Nursery. His home is in Byfield.

Ralph Broughton, class of '34, is engaged in the poultry business in South Peabody.

Robert Moulton, class of '29, has a poultry farm in New Hampshire. He sells most of his products in Lynnfield.

Hartwell Daley, class of '34, is attending Tuft's Theological School where he is preparing for the ministry. During his course of study he is student minister at the First Universalist Church in Assinippi, Mass. where he preaches every Sunday, and where he recently conducted his first Easter service.

Edward Ross, class of 1932, is planning to enlarge his greenhouse in Danvers.

Howard Manning, '33, is now engaged in his own landscape business. He grows annual and perennial plants for market at his home on Andover St., Peabody.

Arthur Wentworth, '26, is employed by the Rowe Motor Company of Peabody in the repair department.

Ashton Danforth '28, is the proud father of a baby girl born on April 4.

Angelina Eldridge, a former student of this School has a responsible and interesting position as field officer at the Connecticut State Farm for Women.

LD

Elizabeth Matheson Long, class of '34, is making her home in Saugus.

Adaïre Townsend, Saugus, class of 1934, has recently returned from spending the winter in Florida.

Dorothy Bruce, Saugus, class of 1935, is employed at the Cape Cod Hospital, Hyannis, Massachusetts.

Elнора Covell, Lynn, class of 1935, is working in Lang's shop, Salem.

FH

REPORT OF FLORICULTURE CLUB

Officers

President: James Cashman Peabody
 Vice-President: Gildo Santin, Beverly
 Program Committee:

Joseph Blunda, Ipswich
 Sargent Griffin, Gloucester
 John Crosby, Lawrence

Among the speakers at the weekly meetings of the F.F.A. Floriculture club this year were: Mr. Adams of the State Hospital, Gardner; Mr. K. McCully, manager of the William Sim Carnation Company, Saugus; Mr. Crombie of Crombie's Flower Shop, Beverly; Mr. Brown of Brown's Greenhouses, Marblehead; Mr. Gibbs of Gibbs' Brothers of Lynn; and James Curran of Curran Brothers of Danvers.

Flower Show

The Floriculture Club has decided to have an annual fall flower show each year. It will be held on Wednesday, Thursday, and Friday of the first full week of school each fall. Premium lists may be obtained upon request.

"Bituminus" Has Triolets

"Bity," the floriculture mascot was visited by the stork on April 2 and was presented with three kittens.

JC

ATHLETIC BANQUET

On Apr. 2, the annual athletic banquet was held in the homemaking building under the auspices of the Alumni and the Recreation Committee of the F.F.A.

Arthur Kochakian, '26, of Haverhill, acted as toastmaster and introduced the following guest speakers: Director F. A. Smith, Mr. Frederick Butler, and Mr. Robert Mitchell of the Board of Trustees, Coach Vye of Danvers High School, Senator McAree, Haverhill, and "Jack" Sturtevant, '30, captain of the Massachusetts State College football team.

Coach Couhig, aided by Mr. Mostrom, presented sweaters to students John Fullington, Arthur Glackin, Christy Mavros, John Munroe, Myron Eastwood, and Donald Gasper.

Football letters were awarded to Captain Lewis Norwood, Captain-Elect Gildo Santin, Manager D. Woodward Walker, Stanley Bickford, Myron Eastwood, John Fullington, Robert Farmer, Arthur Glackin, Joseph Lydon, Christy Mavros, Ernest Santin, Norbert White, Kenneth White, Donald Gasper, Chester Clinch, John Fay, Leroy MacAloney, Gary Sano, Allen Trask, and Albert Collins. Numerals were given to Anthony Dichirico and Ronald Gourley.

The basketball letter "E" was presented to Captain Lewis Norwood, Gildo Santin, Stanley Bickford, Percy Curtis, Jacob Ranta, John Munroe, Kenneth White and Manager Christy Mavros. Numerals were awarded to James Cashman, Howard Wilson, Gary Sano, Arthur Glackin, and Walter Tataronis.

JK

HONOR ROLL

The following students in the agricultural department merited scholastic honor mention in the third term of the School year:

Seniors

Lewis Norwood**, Rockport;
 Edward Bessom*, Lynn;
 Lawrence Shanks**, Essex;
 James Goodale*, Charles Clinch*, Middleton;
 Elmer Aldrich**, Andrew Bye, Beverly;
 Albert Collins**, Danvers;
 Norman Woods**, Amesbury;
 Mildred Hills**, Byfield;
 Arthur Pohju, Arthur Glackin*, Peabody;
 Ernest Tarbox, Saugus;
 Richard Camarra, Methuen;
 Gordon Hall**, Andover;
 D. Woodward Walker*, Salem.

Juniors

Walter Alley**, James O'Neill**, Merle Graffam*, George Tucker*, Lynn;
 Gilbert Freeman**, Warren Town*, Paul St. Linger**, Gildo Santin**, Donald Gasper*, Beverly;
 Melville Low**, Saugus;
 David Elwell**, Essex;
 Warren Kneeland*, Rosario Richards*, Salem;
 Henry Smolak*, North Andover;
 Walter Hichens**, James Webber**, Louis Rosi*, Middleton;
 Clayton Teague*, Marblehead;
 Joseph Blunda**, Ipswich;
 Sargent Griffin**, Gloucester;
 Augustine Sheehy**, Lawrence;
 James Cashman, Peabody.

Sophomores

Albert Batchelder*, Norman Peatman**, Andover;
 Sheldon Robinson, John Zielski, Peabody;
 Walter Tataronis*, John Munroe**, Salem;
 Paul Day*, Saugus;
 John Marshall**, Danvers;
 Fred Scribner, Topsfield;
 William Whittaker, North Andover.

2X-Y-Z Class

Sidney Johnston**, Gary Sano**, Lynn;
 Leroy MacAloney**, Groveland;
 Leavitt Moun**, Ernest Santin**, Robert Corneliusen*, Edward Cook**, Beverly;
 John Natti**, Joseph Arnold*, Gloucester;
 Warren Killam*, Danvers;
 Walter Winn**, Clifford Nelson**, Donald Nelson**, Methuen;
 Rhea Gosselin**, Haverhill;
 Allyn Trask**, Peabody.

Freshmen

William Corning**, Peer Johnson*, Elmer Thomas, Beverly;
 Nicholas DeLisio**, Peabody;
 Paul Kelley**, Lynn;
 Howard Stone**, George Burkhardt, Methuen.

Stars signify honor attainment in previous terms.

ANNUAL REPORT F. F. A.

(Extracts)

This year the membership of the Essex Chapter of Future Farmers of America totaled one hundred sixty-eight. Of these fifty have a Future Farmer Degree, and eight the Bay State Farmer Degree.

As in the past, groups of members have undertaken community and school projects. At the Topsfield Fair the Essex Chapter operated a sales booth which profited approximately \$50. Members also exhibited individually, and co-operated with the Extension Service and the Youth and School Departments.

In November, 103 exhibits were displayed by members for the largest and most successful Science Day in the history of the School.

During the past year members have won in the vicinity of \$200.00 in prize money for public speaking, judging, and exhibiting. Representatives from this Chapter were sent to the Topsfield Fair, Boston Poultry Show, the Union Agricultural Meeting in Worcester and to the Massachusetts State College to judge and exhibit.

The Chapter sponsored throughout the year regular meetings of the Bee, Poultry, Ornamental Gardening, Floriculture, Animal Husbandry, and Food Preservation Clubs. It conducted an essay contest, a summer project tour, and presented a play on St. Valentine's Day.

The Thrift Committee has encouraged personal savings accounts.

For the year 1935, the Chapter did a gross business of over \$3,000.

At the close of the project season, October 1935, the pupil labor income amounted to \$69,749.98 or an average of \$300 for the students who completed projects. The total income of the 71 ownership projects was \$20,242.95.

Ownership project production figures for the past year were as follows: 5,309 dozen eggs; 2,639 nullets; 9090 pounds of live weight; 6482 quarts of strawberries; 315 bushels of apples; 7 nints of raspberries; 3,480 bushels of vegetables; 10,775 pounds of squash; 1,097 pounds of pumpkins; 1230 pounds of turn'ns; 1,000 pounds of manuels; 682 pounds of beans and 2,878 pickling cucumbers.

LN

Editor's Note:

All of the extra curricular activities of the school are now functioning under the FFA. The entire athletic program, the publication of the student handbook and magazines, the School orchestra, and the collection of student funds are planned for in detail by the different working committees.

The regular meeting of all members held once a month is fashioned after the New England Town Meeting. Here the member is under obligation to observe strict parliamentary practice and it is here that the rights of others and the value of co-operative endeavor are brought forcibly home to the student. In a word the FFA meeting is the training ground for practical lessons and actual experience in citizenship.

F. F. A. ACTIVITIES

Judging and prize-speaking contests for agricultural students and the annual state meeting of the Future Farmers of America drew many vocational students and their instructors to Amherst on Apr. 10 and 11.

Judging of dairy cattle, horses and poultry took place on Friday afternoon. Archie Nimmo of Methuen placed fifth in horse judging. Gordon Hall of Andover judged in poultry. This school had no contestant in dairy judging.

The annual public speaking contest for agricultural students was held in the Jones Memorial Library, Amherst, on Friday evening. First and second honors went to Roland Ashley and Vincent Foster of the Bristol County Agricultural School. Charles Mahoney of Essex County Agricultural School placed third and Wellington Cleary of Northampton, 4th.

Saturday morning Henry Smolak and Archie Nimmo of this school participated in milk judging and placed first and second respectively.

At the meeting of the Massachusetts Association of Future Farmers of America, the following state officers, as recommended by the executive committee, were unanimously elected:

President: Charles Clinch, Essex Chapter

Vice-President: Robert Kennedy, Bristol Chapter

Secretary: Charles Johnson, Worcester Chapter

Treasurer: D. Woodward Walker, Essex Chapter

Reporter: Clifton Allen, Dartmouth Chapter

Advisor to Reporter: Mr. Franklin E. Heald, Amherst

Advisor to State Association: Mr. Rufus W. Stimson, Boston

At this meeting six members of Essex Chapter were advanced to the grade of Bay State Farmer. They are: Merle Graffam of Lynn; Gildo Santin, Beverly; D. Woodward Walker, Salem; Ernest Tarbox, Saugus; Gilbert Freeman, Beverly; and Charles Clinch, Middleton.

ECHO CLUB PROGRAM

On March 25th the members of the Echo Club entertained the Future Farmers of America at a joint assembly. The speaker was Mrs. Thomas Rudkin of Beverly.

Mrs. Rudkin's theme was "Stretch Your Minds." She related some of her experiences with the students at the Lyman School for Boys at Westborough; and some of the problems brought to her by young girls and boys.

The boys at Lyman School are not bad boys, in the true sense of the word; they just do not stretch their minds. Because they are mentally lazy they get into many kinds of difficulty.

It is Mrs. Rudkin's conviction that instead of taking the easiest way out we should do what is best for us, something which will make us think. Good literature and culture will always stand by us. There is a wealth of material around us of which we are not making use.

Marionettes

On May 5 the Animal Rescue League of Boston will present "Peter Rabbit" in marionettes.

Toward the latter part of May the nominating committee will make up a ballot of officers for the following year, and before the close of the school year elections will take place. RR

ESSEX AGGIE EASTER PARADE

Easter seems to be the day for everyone to strut out in new clothes, and the "Essex Aggies" were no exception.

Gertrude Lawton headed the parade. Miss Lawton made a tan coat for herself and she also outfitted two of her sisters. She made a blue coat and a light dress for one of her younger sisters and a skirt, vest, and coat for another. These clothes were very well made and were just as tailored and attractive as any suit or coat one could purchase in a store.

Phyllis Thompson made a suit, skirt, and short jacket for herself. The jacket is plain blue and the skirt is blue with white pencil stripes, the latest fashion.

The Misses Ruth Dixon and Catherine Casey joined the Lawrence Easter parade in clothes made by themselves at "Essex Aggie." Miss Dixon wore a tan sport coat and green silk dress and Miss Casey wore a red and white figured two-piece challis dress.

A few of the girls who wore the silk dresses they made on Easter are Misses Ethel Lewis, Emily Currier, Laura Chase, Marian Hodgins and Henrietta Stockley. Almost all of these dresses were made of bright and pretty figured materials. Helen Chase wore a brown, white, and green figured silk dress with a green knitted coat—both made by Miss Chase.

Miss Evelyn Homan wore a green and white checked coat and Miss Evelyn Young a brown and white checked coat. These coats were made at "Essex Aggie" by their owners.

I have only named a few girls, but many "Essex Aggies" joined this Easter parade dressed in clothing they themselves made, and they were picked out as the smartest, best dressed young ladies on Easter of 1936. HC

CHANGE OF PROGRAM

The Homemaking department is now starting on its last quarter of work to complete the year's course of study.

The Freshmen B division changes from cooking for the teachers' cafeteria to cooking in the afternoon in order that the Freshmen A division may cook for the teachers' cafeteria.

The Juniors are now taking gardening in place of handicraft. They have Mr. White, of the agricultural department, as their instructor.

The rest of the pupils in the homemaking department have the same studies they have had in previous terms. PT

JOINT ASSEMBLY

Changes taking place in Palestine and Egypt was the subject of an interesting and instructive talk given before the student body by Rev. Sheldon Kelly of Malden on April 9. Last year Mr. Kelly spent several months visiting these countries and the audience received first hand information regarding their development under the Jewish colonization.

The articles of clothing and other curios shown by the speaker proved interesting to the students. SJ

Garden Chat

Sods removed from your garden plot, if not turned under, should be piled up in a far corner of your yard to rot down. To this pile, one might add an occasional layer of lime to aid rapid decay. This compost pile should be built in a rectangular shape and kept flat on top so that the rains will soak into the pile instead of running off. Any lettuce and cabbage leaves, lawn mowings, weeds, etc., may be added to this pile as the season advances. For best results the pile should be turned over several times during the year for rapid decay and this decayed organic matter would add quite a little plant food to your garden plot next season.

If you are planning to start an asparagus bed in your garden this year, select one side of your plot and dig a trench about nine inches deep and the width of a shovel. Place the asparagus roots 15" apart in the row on a small mound of soil, distributing the roots well, and cover with an inch of soil. As the shoots of asparagus grow you may fill the trench in so that within six or eight weeks the ground will be level. Rows should be three feet apart for a small back yard garden, while for commercial practices it is advisable to have rows four feet apart. Mary or Martha Washington roots should be set anytime until May 10th.

In preparing your backyard garden be sure the fertilizer is thoroughly mixed in your soil before the seeds are planted. If plant food is not well mixed in the soil the little rootlets may be burned, preventing the growth of the seedlings. This is often true when a dry period of weather is encountered.

In Essex County conditions it will be safe now to plant any of the cool weather crops in the open, such as: spinach, lettuce, cabbage, beets, carrots, parsnips, peas, onions, radishes and early turnips. Wait until the middle of May before planting or setting the warm weather vegetables, such as: sweet corn, squash, cucumbers, beans, tomatoes, and peppers.

C. M. Stearns,

Instructor in Vegetable Gardening

Flood Relief

Mrs. Mary Roundy, R. N., and Instructor at this School, reports that members of her Home Hygiene classes in Groveland, North Andover, Lawrence and Haverhill gave untiringly of their services, sorting clothing, serving meals and assisting in school buildings which were temporarily used as relief stations.

Many organizations in Danvers donated food, money and clothing.

Flood Damage In Essex County

(Survey made by F. C. Smith, County Agent)

It is difficult to estimate the final or permanent damage to land resulting from the recent floods. Some of the land, covered with sand to a varying depth may be plowed under deeply enough to make the old soil tillable. What the effect of the sand during drought conditions will be is problematical.

Land

In Essex County it has been estimated that the loss of land either by erosion or by the deposit of large quantities of sand (in some cases five feet) exceeds a value of \$32,400.

Crops

Another loss caused by the flood was the destruction, (resulting from a coating of creosote or tarvia which floated on the flood water) of crops, trees, hedges, and vineyards. Along the banks of the Merrimac from Methuen to Haverhill are countless small vineyards. These have been covered with sand and creosote. Some will recover. But the labor involved in removing sand, cutting back trees, grapes, hedges, and shrubs will be great. There will be the added loss of production for two or more seasons. These damages are estimated at \$12,500.

Poultry

Poultrymen lost heavily. Birds were drowned and hatching eggs were destroyed with the elimination of electric currents.

Farm Buildings

The destruction of farm buildings and equipment included loss of greenhouses, tool sheds, brooder houses, incubators, feed hoppers, and storage cellars, amounting to a value of \$37,000 for farmers only.

These figures are, in many cases, conservative. There seems to be but one optimistic thought relative to the disastrous effects of the flood. It has developed sympathy on the part of the fortunate, and courage among the less fortunate survivors.

SPRING SALAD

(Continued from p. 1.)

berries in the center. Cut a very narrow strip of angelica. Insert this on either side of the pear for a handle to give a basket effect.

Essex Aggie Salad

- 1 Package lemon gelatine
- 1 cup chopped celery
- 1 pimento
- 1-4 pound cream cheese
- 1 cup crushed pineapple.

Use pineapple juice as part of the liquid on gelatin. Cream the cheese with the other ingredients and add to gelatine after it has started to thicken. Serve on lettuce leaves.

Phyllis Thompson,
Student

Soil Conservation Act

There are five objectives in the Soil Conservation Act. Each is fundamentally important to every man whose interests are directed toward the prevention of floods and like disasters which occur when soil is not properly conserved.

These objectives are: (1) Preservation and Improvement of Soil Fertility by Soil Improvement Practices. (2) Promotion of the Economic Use and Conservation of Land. (3) Diminution of Exploitation and Unscientific Use of National Resources. (4) Protection of Rivers and Harbors Against Soil Erosion, for the Purpose of Aiding Flood Control and Maintaining Navigability. (5) Re-establishment of Ratio Between Purchasing Power of the Net Income per Person on Farms Which Prevailed during the 5 Year Period (August 1909 to July 1914) and the Maintenance of this Ratio as Determined by the Secretary of Agriculture.

Through this Act, State, County and Town Committees have been appointed to direct the execution of the stated objectives. The Essex County Committee, appointed on the recommendation of County Agent F. C. Smith, consists of: Joseph Smith, Lynnfield Center; Melville Grey, Wenham; Harold Rogers, Ward Hill; Harry L. Cole, West Buxford, and G. Leonard Sargent, Merrimac.

Some of the soil improvement practices suggested by the State Committee and approved by the Secretary of Agriculture, are: topdressing pasture soils, \$7.00 per acre; clover seeding for hay alone or in mixtures, \$17.00; topdressing hay land, \$3.00; green manure crops, \$2.00; winter cover crops, \$1.00; reforesting crop land, \$5.00 per acre; orchard mulching, \$2.00 per acre.

Anyone desiring more explicit information about this Act may receive it from the County Agent F. C. Smith, Hathorne.

ORIGIN OF HANDKERCHIEFS

(Continued from page 1)

which they carried tucked beneath their girdles.

The development of the handkerchief was rapid, and in France in the seventeenth century it reached an elegance hardly conceivable. Handkerchiefs were made of hand wrought laces sometimes studded with jewels. In the eighteenth century women began to use colored handkerchiefs. Louis XVI. inspired by Marie Antoinette, issued an edict causing handkerchiefs to be made square, rather than oval, round or oblong as the individual saw fit, and although the size may vary, it is the square handkerchief that is most popular and most commonly used today. And you must admit that the brilliant-colored handkerchiefs flaunted with this spring's costumes add a definite touch of gaiety.

Abbie L. Clapp,
Instructor in Clothing

Round About the County

In Prospect

Professor William R. Cole, of the Massachusetts State College, will give a canning demonstration in Essex County, on May 7. The time and meeting place have not as yet been determined. It will be an open meeting. Anyone who is interested is asked to communicate with the Extension Department at this School.

Herb Gardens

Professor Arnold M. Davis of the State College will be in Topsfield at the home of Mrs. George Francis Dow, May 11, to talk on herb gardens. He will also be in Peabody at the Unitarian Parish House on May 21 at 2 P. M.

Open dates for similar meetings with Mr. Davis are June 22 and 23.

Continuing

Clothing classes under the direction of Mrs. Mary M. McIntire, Home Demonstration Agent, are continuing at the Essex County Sanatorium Monday mornings. On Fridays, Mrs. McIntire instructs classes in chair caning.

Home Nursing

On the following Thursdays, at 7.30 P. M., Mrs. Mary E. Roundy will conduct classes in Home Hygiene at the Y. W. C. A. building in Newburyport: April 30, May 7, 14, 21 and 28.

On Tuesdays Mrs. Roundy will instruct classes in advanced home hygiene at Washington Hall, South Groveland, at 2.45 P. M., beginning April 28, and continuing through May 26.

On Fridays, May, 15, 22, and 29 a similar course will be conducted by Mrs. Roundy at the Salem Methodist Church, Lafayette Street, at 7.30 P. M.

Clothing

Clothing classes under the supervision of Mrs. Mary M. McIntire will be held at this School, in the Extension room, April 28, May 5, 12, 19 and 26.

Home Accounts

On May 1, Miss Grace B. Gerard of the State Extension Department will conduct a Home Accounts meeting at the Knights of Columbus Hall, Peabody, from 10.30 to 3.30.

Mrs. McIntire will give a talk on wallpaper before the Salem Mother's Club on May 29.

Furniture Renovation

Classes in furniture renovation which started in Gloucester April 16, will be conducted by Mrs. McIntire April 30, May 7, May 14 and May 28.

MAY 9

Massachusetts Vocational
Association Meeting
at Worcester



4 - H CLUB NEWS



Saugus Wins Again

The Banner again goes to Saugus for the highest percent of egg production in March. This is the third month that Saugus has won.

Adding the percent of members reporting to the percent of production total presents in the clubs were as follows:

Red Rooster Club, Saugus	142.2
The Crowell Star, Haverhill	141.6
Thrifty Egg Producers,	
Haverhill	129.6
Live Wire Club, Haverhill	121.8
Bartlett School, Haverhill	120.9
High School, Haverhill	119.5
Haverhill's Best, Haverhill	110.8
The Jolly 13, Haverhill	99.7

The following individuals won blue ribbons:

Harold Sturtevant, Algert Ramaika, John Pecci, Robert Atwood, Donald Atwood, Ernest Chandler, George Hazeltine, Eleanor Campana, James Zatzos, George Alvenos, and Robert Kimball, all of Haverhill; Paul Marsden, Paul Corson, Saugus; George Bogannam, Methuen.

Red ribbons were awarded to the following:

John Taylor, Edmund Foisy, Margaret Oberti, Mitchell Hyder, Francis Perry, Edward Sirski, and Stanley Paszke of Haverhill; Edward Mears, and Dave Elwell, Essex.

Yellow ribbons have been presented to:

Charles Gibbs, Saugus; Robert Wilson, Rita Corbett, Michael Difeo, Kalope Makrogious, Romeo Parine, Raymond Jenkins, Robert Lamond, Anthony Maggio, all of Haverhill; and John Marshall of Danvers.

Blue ribbons are awarded to flocks with 22 eggs per bird, or over; red ribbons to flocks with from 20 to 22 eggs per bird; and yellow ribbons to flocks with from 18 to 20 eggs per bird.

H. J. Shute,
4-H Club Agent

Groveland Clubs Relieve Flood Victims

Groveland 4-H club girls deserve recognition for the splendid way in which they helped out during the recent flood disaster. Every 4-H club girl in Groveland did canteen duty and stood ready to help whenever they were needed. Some of the girls worked both day and night washing dishes, waiting on table, and working in the store room.

This is the kind of 4-H spirit we like to see and can admire. It was a splendid response.

V. A. Bisbee

Contest Day

June 6 at Essex County Agricultural School is to be a 4-H Club Contest Day for girls. At this time the Clothing Club members will compete in the 4-H Club Dress Contest.

There is also to be a contest for the Food Club members which will include food notebooks, recipe files, and the judging of packed school lunch menus.

A new contest is being introduced this year for junior girls: that of making muffins. The Senior contest will be based on the preparation of carrots.

The county-wide poster contest will also be held on this same day.

We are planning a day of frolic! Let's see which club will be best represented! We want a fine showing.

Vera A. Bisbee,
Assistant 4-H Club Agent

Groveland

The art teacher in the Groveland schools became interested in 4-H club work. She visited Mrs. Jordan, our local leader, and learned the requirements of 4-H club work. She is now having the club members in her classes make 4-H club note books. We are always glad to hear of such fine cooperation on the part of our teachers.

V. A. Bisbee

Canning Clubs

Spring—and with it thoughts of summer vacation. What are you going to do with your spare time? It's not too soon to begin thinking about a summer project. Join a canning club and you will be doing something worthwhile and making the most of your spare time. Look ahead and visualize Fairs, new friends, good times and perhaps prize money. We want everyone to "Hop-To-It" and have a canning club organized before school closes for the summer. How about it.

V. A. Bisbee

Saugus

Saugus clubs responded in a true "Hop-To-It" manner when a call came for donations to help out those club members who were unable to provide material in order to meet the requirements of their projects.

Nearly every girls' club has donated something toward this cause. Now every club member has an opportunity to finish her project. Isn't this a splendid spirit for club members to show?

V. A. Bisbee

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 17

HATHORNE, MASS., MAY, 1936

NO. 5

Sun Baths

The sun that tans the child's skin helps him to grow normally. It gives his body the power to use food which will help build straight bones, strong muscles, and well-formed teeth.

The beneficial effect of sunlight — which a child needs most in his early growth — is best obtained when the rays reach the skin directly. Clothing and ordinary window glass keep out the ultra-violet rays, those rays which prevent and cure rickets. Tanning shows that the sun's rays are reaching the skin directly. It is a proven fact that dark-skinned children need more sun as protection against rickets than babies with fair skin. Great care however should be taken to prevent burning.

Begin Sun Baths Early

Every mother who wishes her baby to have robust health should give him regular sun baths from early infancy until he is old enough to play in the sun himself. Sun baths may begin when the baby is three or four weeks old.

On warm days sun baths should be given out of doors when the sun is not too hot—in the morning and late afternoon. In cold weather they should be given indoors when the sun is warmest and the ultra-violet rays most intense—in the middle of the day.

A baby's eyes will not be hurt by the sun unless they are turned directly toward it and are open. During the first month of life turn the baby's head so that first one cheek and then the other is toward the sun and the eyes away from it. After this, if he lies with his feet pointing away from the sun and his head slightly raised, the shadow of his forehead, eye brows, and eyelids will shield his eyes.

A baby who has his first sun bath in warm weather may have all his clothes taken off except the diaper. Let the sun shine on him for 10 min-

(Continued on page 2, col. 3)

Had You Realized

That early cut hay has many advantages over later cut hays?
That before you receive the next

Farm Shop



Farm shop where farm machinery and implements are made and repaired by students

issue of this paper the haying season should be well under way?

That your alfalfa should cut for hay when one-fourth to one-third in bloom, because at this time new shoots will be found starting from the crowns of the plants, thereby assuring a good start for the second crop? Also, hay cut at this time contains a large amount of leafy palatable feed that is high in protein and low in fiber content. Had we not better grind the mowing machine knives on the first rainy day?

Did you know that grass hays are even more ready of early cutting than alfalfa because of the great difference in composition, between young grass and the stage of maturity when it is usually cut. Timothy, especially, must be cut early for when fully mature it is very unpalatable for dairy cattle. Timothy should be cut when coming into bloom. It can not be cut too soon after taking on that temporary purplish tint of bloom and that will be within a month. Isn't it about time to grease the hay fork?

Were you aware that there is a lot to be done in preparation for the haying season between now and June 15th, and that it should be done now, for we shall all be too busy after that date.

Ralph H. Granger.
Apprentice Instructor

Facts Not Fancies

Arsenical sprays will kill bees. So-called complete sprays contain lime sulphur and Black Leaf 40 in addition to arsenic. Both are bee repellents, and when used with the arsenics, little, if any poisoning results.

J. Stanley Bennett, Secretary of the Essex County Poultry Association states that increasing numbers of poultrymen in the county are tattooing their chix. In many cases pullets are receiving the treatment while being transferred to the range. Results of the tattooing process speak for themselves. In the past year

there has been no record of theft among tattooed chix in the county.

Though there has been a profusion of recommendations for pressing flowers, there seems to be but one reliable solution to the problem of preserving color: that of dipping the fresh flower in warm water previous to pressing it between blotting papers. The process is repeated three times before the flowers are finally mounted.

Rose bugs or rose chafers will appear some time in the near future. Picking these insects by hand and putting them in a can of kerosene is one of the most reasonable ways of controlling them in the garden area, although a combined spray of lead arsenate (4 pounds), molasses (1 gallon), and water (50 gallons) has also proved satisfactory in controlling these pests.

One of the best methods of growing ferns is to place the potted plant in a jardiniere just a little larger than the pot holding the fern. The space between is then filled with peat moss which is kept constantly moist.

Pepper grass, of English origin, may be easily grown from seed in your garden and is an excellent substitute for water cress for those whose good fortune may not include a running brook in their garden areas.

Newly-planted parsley seeds should not be heavily covered with soil.

(Continued on page 3, col. 3)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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Mary M. McIntire

Officers of County Organizations

Essex County Dairy Association
Secretary, Kenneth W. Forman Danvers
Essex Agricultural Society
Secretary, Ralph Gaskell Topsfield
Essex County Poultry Association
Secretary, J. Stanley Bennett Hathorne
Essex County Rabbit Breeders' Association
Secretary, Fred N. Phillips Marblehead
Northern Essex Beekeepers' Society
Sec. Treas., Stephen Dyer Lawrence
Eastern Massachusetts Society of Beekeepers
Secretary, E. S. Batchelder Cliftondale
Essex County Milk Goat Breeders' Association
Secretary, R. H. Campbell Topsfield

Calendar

June 6—4-H County Contest Day for Girls.
June 17—Parents' Day in the Homemaking Department of this School.
June 19—Closing of School for Summer Holidays.
June 24—Better Homes Day, sponsored by the Extension Department of this School.

Parents' Day

On Wednesday, June 17, students of the Homemaking Department will entertain their parents and friends at the School. A program starting at 11 in the morning will include a fashion parade, exhibiting frocks and clothing made by the girls.

Afternoon tea will be served.

Peonies

Peonies require an abundance of water and are greatly benefited by an occasional application of liquid manure when buds start to unfold. Liquid manure may best be prepared by soaking manure in a barrel and diluting the top fluid to a light color. Add this to growing plants once in ten days or two weeks. It is one of the finest methods of stimulating plant growth, and is beneficial not only to flowers but to vegetables as well.

News of the School At a Glance

May 1

Work was started on the long-desired athletic field for this School. Steam shovels and axes are digging drainage ditches and hewing down lumber as preliminary steps to transforming the ten acres of marsh and woodland into a sporting forum. Plans include the construction of tennis courts, a baseball diamond, football field, and track.

May 23

The annual 4-H Club Field Day was held on the School campus, Saturday, May 23. Hearts and voices ran rampant!

Let's Have Tea

What more delightful way to entertain a friend from out of town, than by giving a tea and introducing her to one's friends. If it be Spring, let the table reflect the cheer and brightness of the season by choosing yellow as the predominating color. Have a center-piece of yellow daffodils or tulips. Of course for such an occasion the hostess chooses her best tea cloth, china and silver. She may ask a close friend to preside at the tea table, while another one may be asked to serve the guests. If, however, the tea be for just a few friends, perhaps the hostess herself will pour and invite her guests to help themselves to the sandwiches and other dainties.

To carry out the yellow color scheme, she might have the following menu:

Rolled Sandwiches
Open-faced Sandwiches
Ribbon Sandwiches
Marmalade Sandwiches
Golden Cakes (white icing)
White Cakes (orange icing)
Salted Nuts Yellow Mints

Tea

The fillings for each of the above types of sandwiches might be:

Rolled Sandwiches: yellow cream cheese and nuts.

Ribbon Sandwiches: 1. top layer, thinly sliced tomatoes and mayonnaise. 2. middle layer, egg yolk and mayonnaise. 3. bottom layer, green pepper and cream cheese.

The red and yellow coloring introduced in these ribbon sandwiches will add an interesting bit of contrasting color.

Open-faced Sandwiches: spread top and sides of circles of whole wheat bread with creamed butter; spread tops with sardine paste and then dip sides in finely chopped parsley. The parsley will stick and make an attractive border around each sandwich. Garnish top of each with tiny pieces of pickle or pimento.

Marmalade Sandwiches: cut whole wheat bread in fancy shapes and put together with orange marmalade. A sweet sandwich makes a desirable contrast to the other types.

Economics Applied

Economics, properly presented and applied should give the student new and enlightening conceptions of surroundings already familiar to him. Such an organized study gives him a knowledge of the processes of the business world and an understanding of the economic laws underlying them. It challenges him to apply those principles to cases and situations within his own range of living.

In an attempt to apply economic principles to actual practice in the Homemaking Department of this School, some of these principles have been correlated with the foods work. For five months three girls in the second-year class have been carrying on very definite home projects, the results of which are quite revealing.

Phyllis Marks of Lynn has made a research study of several groups of canned foods including soups, vegetables, fruits, and fish. As need arose in the home for the use of any of these foods, different brands were purchased and the contents of the can analyzed for weight, specific content, flavor, size of can and price. Whenever several brands of any one product were analyzed the best value was indicated. In several instances this was not the highest priced can.

The other two projects followed price trends. Barbara Clark of Lynn charted weekly the prices of over twenty items that her mother used regularly and these included fresh fruits, vegetables and meats. Helen Lucas of Salem charted monthly the price trends of fresh fruits and vegetables, meats, fish, and dairy products used in her home. These charts showed the seasonal rise and fall of prices of certain goods and made the investigator conscious of definite price changes in some products. A person working with a limited foods budget would be aided quite materially in saving many pennies if she followed such a price trend chart.

V. L. Clarke,

Instructor in Economics

SUN BATHS

(Continued from page 1)

utes—(five minutes on the front and five on the back). If the weather is very warm a two minutes' sun bath is long enough at first. Lengthen it each day by three to five minutes. In very warm weather a one-minute increase a day is enough.

The sun bath may be lengthened gradually to three-fourths of an hour, and many babies, especially those over four months may have an hour's sunning once or twice a day.

Mary E. Roundy, R. N.,

Instructor in Child Care

The classes of High School Specials have just had lessons on preparing many delicious tea accompaniments and have learned that from a few types of sandwiches they can make many delicious variations.

Bessie H. McJunkin,

Instructor in Foods

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

MAY, 1936

STUDENT EDITORS

Homemaking Department

Helen Chase, Newburyport
High School Special
Florence Hirst, Methuen Senior
Phyllis Thompson, Saugus Senior
Ruth Riley, Lawrence
High School Special

Agricultural Department

Leonard Duratti, Swampscott
Sophomore
John Marshall, Danvers
Sophomore
Sidney Johnston, Lynn
2X-Y Z
James Cashman, Peabody Junior
James Keane, Nahant Junior
Lewis Norwood, Rockport Senior

ECHO CLUB NOTES

On Tuesday afternoon, May 5, the Homemaking Department was entertained by Miss B. Maud Phillips, the Director of Humane Education under the Animal Rescue League. Miss Phillips has spent two summers in Labrador working with Sir Wilfred Grenfell instructing the children. She is returning to Labrador next month.

Miss Phillips described and showed some of the very clever work done by the Labrador children. After telling a few thrilling experiences of Doctor Grenfell, Miss Phillips and her assistant, Miss Neilson, presented a marionette show entitled "Peter Rabbit." Miss Phillips made this marionette show to take to Labrador to help teach the children to be kind to animals. It is very effective. The marionettes included Mother Rabbit, Flopsy, Mopsy, Cottontail and Peter Rabbit, Daddy Bear and other animals. These are cleverly and very well made. The sceneries were excellent. The first act was in the yard of the rabbits' home; the second, Mr. McGregor's garden, and the third was the inside of Mother Rabbit's home.

Many were disappointed because there was not time for Miss Phillips to show a moving picture of Labrador, but we all hope we may have her back sometime and then not only see the picture but hear some more thrilling experiences of Dr. Grenfell, and Miss Phillips in Labrador.

The meeting of the Echo Club in June will be a regular meeting with the election of officers for next year.

HC

CONFERENCE GUESTS

Our School was very fortunate in having supervisors of other vocational schools in this country visit us on April 27. They were attending the North Atlantic Regional Conference for Vocational Home-making Supervisors. Part of their time was spent visiting vocational schools in the vicinity of Boston.

Supervisors from West Virginia, Delaware, Maryland, New Hampshire, Maine and Massachusetts visited our school.

The food majors showed their skill by preparing and serving luncheon for them at which time our teachers were hostesses. Exhibits of clothing, chemistry, handcraft, and child care were set up in the assembly hall. Other work was displayed on the bulletin boards in the main corridor.

Miss Florence Fallgatter, chief of the Home Economics Service in Washington, and Miss Beulah Coon of the United States Office of Educational Workers Conference in Boston were among those who visited our school.

FH

VOCATIONAL APPROACH

How often do we hear that Johnny has failed in English or that Mary can't do arithmetic? Johnny is itching for Spring so he can start his garden and Mary had rather be helping mother with the housework than trying to solve some abstract problem. We can readily see that the Johnny and Mary types want to work with their hands, and for this the academic school fails to provide sufficient opportunity.

How different are the methods at this School where one half of the year is devoted to actual practice in the field on productive agricultural work. Students must have a project to satisfy the requirements of the School. This project involves a definite amount of agricultural work carried on under instructor supervision, and should be financially profitable. If a student is really interested, he "learns to do by doing" (vocational maxim). The class room studies in agriculture and science have a direct bearing on the work in which the student intends to engage.

The academic studies in a vocational school have "training in citizenship" as their main objective. However, if these studies are related to the student's project they have a vocational as well as an educational value. In the English department for example, analytical studies of classic literature and formal grammar have given way to assignments which consider the vocational interests of the student. There are two reasons for this: first, in a vocational school the time allotted to English is insufficient for the regular academic approach, and second, the vocationally minded student is anxious to acquire his working tools as quickly as possible. Thus English becomes a working tool to advance the student in his chosen field of activity. With this in mind, composition for agricultural students is based on real problems and experiences: farm practices, reports of farm visits, and reports of book, magazine, and news articles. In fact, English takes on a vocational atmosphere. The student learns to read, write, and talk the language of the trade.

Vocational methods interest the student if the student is interested in the vocation.

G. E. Gifford,
Instructor in English

FALL FLOWER SHOW PLANS

With H. Linwood White, Instructor, as Faculty Advisor, the following committee has been formed to take charge of the flower show to be held at this School in October:

Chairman, James Cashman, Peabody
Joseph Blunda, Ipswich
Andrew Bye, Beverly
Sargent Griffin, Gloucester
Elmer Luxton, Wenham
Palmer Jones, Salem
George Morrill, Newburyport
Charles Pettengill, Haverhill
Ernest Tarbox, Saugus

The rules of the Contest are:

1. Any under graduate of the school may exhibit.
2. The show will run from October 7 to October 9 at 3:30.
3. All entries must reach the chairman not later than 9 A. M. Frid., October 2. All exhibits must be staged by 3:30 P. M. Tuesday, October 6.
4. No exhibit may be offered for competition in more than one class.
5. Exhibits not provided for in the schedule shall receive such recognition as their merits may warrant.
6. Exhibitors must keep their exhibits fresh throughout the show.
7. Exhibitors shall be classed as follows:
 - A. Exhibits set up and plants grown by exhibitor.
 - B. Exhibits set up with plants grown by another person.

Twenty acres of corn, planted in 1621 at Plymouth, and a few goats that were brought from England by the Pilgrims became the modest beginning of agriculture in the Commonwealth of Massachusetts. Wheat, rye, corn, oats, and flax were among the first crops planted by the early settlers.

Birds need more mineral feed in proportion to their total feed requirements than most other classes of animals, say poultrymen at Massachusetts State College. This is primarily because the egg-shell is composed largely of mineral matter and also because the skeleton of the bird requires considerable mineral to keep it in repair.

EXHIBIT AT JORDAN'S

An exhibition was held at the Jordan Marsh Company's Family Information Center, in observance of Child's Education Week from April 27 to May 8.

Essex Aggie contributed to this exhibit by sending in a chart entitled "Physical Growth" which gave the normal growth of a child beginning from birth to the age of six years. There were also two charts on the "Progress of the Dionne Quintuplets" since their birth. An added feature was a toilet tray which included jars for cotton, olive oil, boric acid solution, a soap dish and pins.

These exhibits were all made and decorated by the girls from the School and they received much recognition.

RP

ALUMNI NOTES

On April 17, Miss Victoria Townsend, a graduate of the Homemaking Department, became the bride of Melville Low who attended the Agricultural Department.

Elnora Covell from Lynn is working in the alteration department of Lane's Shop in Salem.

Kenneth Harnden who graduated from the Agricultural School in 1924 is a meat cutter for H. E. Beane, 2 Faneuil Hall, Boston. He lives at 12 Emory Street, Saugus.

HC

Alfred Jordan, '23, and D. Woodward Walker, '36, are employed at Groton House Farm in Wenham.

Frank Cutting, class of 1934 is caretaker at the Lone Tree Farm in Hamilton.

SCHOOL FARM AND GARDEN

About twenty students find projects on the school farm or market garden each year. The vegetable garden division under Instructor Stearns is this year employing Jacob Ranta of Rockport, Harold Dossett, Beverly, John Lynch and Richard Paulsen of Lynn, and John Hocter of Peabody. Sidney Porter, '33, is graduate foreman of this division.

On the poultry plant Gordon Hall of Andover and Roy Ford of Topsfield are employed.

Philip Webber of Middleton and William Long of Lawrence keep the grounds in condition under the supervision of Instructor C. Shannon Wright.

Rhea Gosselin of Haverhill, James Cashman of Peabody, and Robert Farmer, of Lynn are employed in the greenhouse by Instructor H. Linwood White.

Tony Fiore of Swampscott; Warren Killam of Danvers, Percy Curtis of Rockport, Stanley Bickford of Lynnfield, and Emile Ouellette of Salem, are employed in the dairy division.

In the fruit division Ronald Gourley of Salem, Walter Alley of Lynn, and Donald Gasper of Beverly are employed. James O'Neill of Lynn is employed in the fruit nursery.

OF ALUMNI INTEREST

The following letter was written by Edwin R. and North P. Sherrill, graduates of this School who are now located on the Sherrill Stock Farm, Lexington, Nebraska.

"Dear Mr. Smith and all"—

I suppose by this time all the boys are out on their projects. Wish we were nearer and some of them could be here.

We have a plot of ground on a slope which we believe will make a good orchard. We have irrigation and the climate during the summer is not much different from that in New England.

We have 250 acres of small grain (barley and oats), 12 acres of sweet corn already sown (April), and are now preparing 125 acres for field corn. There are 125 acres of alfalfa, 45 of which were sown last year and we expect to have a small patch of potatoes on the place, around 17 acres.

Last fall, my father, and we boys bought two carloads of lambs from Lemhi, Idaho, at \$5.50 per cwt., with freight paid to Missouri River, 556 head. We topped the market twice at St. Joe, Mo., for the year at \$10.85 first lead and \$10.65 second lead. We ran them over stubble fields, fed them sweet corn stalks and corn, also alfalfa. We ground our field corn, cob and all, so as not to founder them. Out of the total number three were killed and three died.

We have a tractor and 17 work horses on the place which constitutes our working force at present.

Neither North nor myself have had time to think of getting married as we understand many of our classmates have done.

Kindly remember us to everyone, faculty and students."

PROJECT NOTES

Peer Johnson, Jr., of Beverly, has a vegetable garden project in Essex. He is also taking a series of moving pictures relating to agriculture and the work of the school.

Gilbert Freeman has a sizable poultry project at his home on Dodge St., Beverly.

Members of the X-Y-Z classes will watch with interest the market garden enterprise of William Corning, Robert Corneliusen and Raymond Kennedy. These young men, all of Beverly, are working a three-acre plot on the Hood farm property off Trask Street.

Charles and Chester Clinch of Middleton have leased the Roadside Stand on the Newburyport Turnpike from the Essex Chapter of Future Farmers of America. They also have a vegetable garden project in Middleton.

In 1890 two-thirds of the boots and shoes manufactured in the United States were made in New England. Lynn, Massachusetts, in 1890, was the premier shoe manufacturing city of America, with 323 factories producing annually goods worth \$26,000,000.

HONOR ROLL

The following girls in the Homemaking Department have successfully completed their work for the third quarter. To attain Honor Roll scholarship an average of 80 per cent or over must be acquired.

High School Specials

Helen Chase, Newburyport
Emily Currier, Salisbury
Ruth Dixon, Lawrence
Beatrice Emerson, Haverhill
Mildred Kennigar, Danvers
Ethel Lewis, Essex
Mary Minichello, Ipswich
Ruth Peterson, Beverly
Elizabeth Poland, Newburyport
Priscilla Preston, Beverly
Ruth Riley, Lawrence
Silvia Smith, Rockport
Henrietta Stockley, Peabody

Seniors

Agnes Burke, Methuen
Mildred Humphreys, North Andover
Rita Pasquale, Lynn

Juniors

Barbara Clark, Middleton
Evelyn Gould, Boxford
Evelyn Howard, Methuen
Phyllis Marks, Lynn
Yolandia Scamperino, Lawrence
Lena Tela, Lawrence

Freshmen

Frances Carty, North Andover
Eleanor Hoelzel, Middleton
Olive Purdy, Ipswich
Ellen Wills, Ipswich
Katherine McLaughlin, Malden

RR

GRADUATION DRESSES

Early in April the Senior Class of the Homemaking Department met in a body for the purpose of choosing the color and type of material to be used in making their graduation dresses.

The colors agreed upon were navy and white for the High School Special Division, and for the Seniors an all white dress with a corsage of flowers as the only decoration.

Due to the fact that the Seniors who take a three-year course receive a diploma, while the High School Specials who take a one-year course receive a certificate, the choice of a different color for each group makes some distinction between them.

About half the "Specials" chose taffeta as their material while the remaining half chose to wear crepe.

The Seniors were divided between crepe and acetate linen.

The entire class sent its order in as one and when they returned after the Easter vacation they found two large packages in Mrs. Dunn's room which gave proof the material had arrived.

The patterns for these dresses differ. They were selected from various magazines and fashion books and each girl selected her own pattern.

The fact that the graduation takes place in the winter makes it necessary for the dresses to have long sleeves. The making of the graduation dresses is recognized as the last clothing project of the year and often includes a combination of many problems which the girls have met previously in their clothing work.

Rita Pasquale

Garden Chat

Cutworms are busy once more. Don't wait till they have cut off most of your tomato, pepper and cabbage plants. On a small scale you can loosely place a band of paper about your plants so that several inches will protect the stem below and above the surface of the ground. Where no hens or pets are about you can mix up the following mixture and apply at evening time:

10-12 qts. of Bran or Middlings
1-4 lb. Paris Green, or 1-2 lb. Arsenate of Lead

Cup or two of cheap Molasses

Enough water to make sticky but not sloppy—Mix well.

The vegetable garden at the School will furnish farmers and garden enthusiasts an excellent opportunity to check on new varieties this season. From twenty to thirty top-cross and hybrid strains or varieties of corn will be seen. The first study to note as to their adaptability, etc. to Essex County conditions will be spinach—some twenty different varieties are in this study. Early varieties of beets and carrots will be noted in early July. In August excellent studies of corn, cucumbers, tomatoes and peppers will be noted. In September one will have an opportunity to note the squash and celery studies.

As soon as the seedlings are up high enough to distinguish the rows, the cultivator should be kept going to destroy all weed growth and to make a soil mulch to help conserve the moisture.

The ideal time for transplanting seedlings such as cabbage and tomatoes is during a rain or cloudy weather. If this is impossible, use the latter part of the afternoon.

C. M. Stearns

Bartlett Saved \$2.60 Daily

Chairman Edmund Bartlett of the Salisbury Extension committee reports that his herd of cows produced ten twenty-quart jugs of milk daily on hay cut early, about June 15, 1935, but when he had to change to the top of another mow where the hay had been cut late, July 15, 1935, the herd dropped two jugs daily. This difference was worth six and one-half cents per quart or \$2.60 daily.

His total savings were \$239.20, or the equivalent of twelve tons' value.

Let it be added that early cut hay analyzes higher in protein than late cut hay. It is nearly as high in protein as alfalfa.

F. C. Smith,
County Agent

JUNE 6

4-H CONTACT DAY

Timely Thoughts

Spray injury in the orchard is reduced if the sprays are applied on clear, cool days, early in the morning or late afternoon. Temperatures above 80° F. increase the chance of spray injury.

The use of large quantities of vegetable seed tends to produce weak seedlings and increases the amount of thinning necessary later in the season.

Thinning upsets the root systems of those plants which you permit to remain. They recover quickly when small; hence make sure you do your thinning as soon as possible.

Crowding of chicks on the range reduces future profits as much as crowding in the laying house.

The house fly is most easily controlled if the few individual flies which appear early in the season are destroyed and the breeding places eliminated.

Cabbage maggot flies are now laying eggs around the stems of cruciferous plants (cabbage family) just under the soil line. These recommendations will insure a maggot free stand of plants; for plants in field, apply a solution of corrosive sublimate (1 ounce to 10 gallons of water) at the rate of 1-2 cupful to the soil around the plants, a few days after plants are set, and two more applications at intervals of one week.

The following preventative measures will check the development of coccidia:

1. Keep houses cool and dry.
2. Maintain uniform day and night temperatures.
3. Keep the floor dry around the water fountains.
4. Have deep, dry litter and stir daily.

Yellow spinach is an indication of acid soils. Lime will correct this condition.

Aphids are now working on crop plants. Follow these recommendations: when insects appear, spray with 1-4 teaspoonsfuls nicotine sulfate and 2-3 ounce of any good soap, in 1 gallon of water; or apply nicotine dust. Pyrethrum and rotenone sprays are also effective. Remember to apply spray or dust to under side of leaves where lice are feeding. Nicotine sulfate may be added to Bordeaux mixture without the addition of soap.

J. F. Gallant,
Instructor in Science

Care of Delphiniums

As delphinium leaves develop from now on they should be sprayed with Bordeaux Mixture to control Bacteria Leaf Spot of Delphinium. This disease is becoming particularly rampant and is best kept up by using Bordeaux Mixture. For best results this mixture should be used according to the manufacturer's directions.

Seasonal Weather Notes

The winter just past did not plunge us into such extremes of cold weather as the previous two winters; but the cold periods were long sustained and the temperatures in January and February were well below normal. March went to the other extreme, averaging 6° above normal for each day of the month. It was so warm that April seemed unseasonably cold by comparison whereas the temperature for the month was only slightly below normal.

Although the winter snow fall was normal the total precipitation was unusually heavy. At the end of March the total was nearly eight inches above normal, and almost half the usual annual total. In spite of the fact there were fourteen rainy days in April the total rainfall for the month was somewhat less than normal, and on May 1 the excess above normal had been reduced to a little over seven inches.

Hours of sunshine were above normal for both January and February but away below normal for both March and April. The lack of sun in the latter month undoubtedly contributed much to the impression of coldness.

The heavy rains and warm weather in March caused an unusually early development of apple scab spores making it necessary for fruit growers to protect foliage with early scab sprays.

Vegetation in general was forced into unusually early development but was later slowed down considerably by a rather cool April. At the present time development is still somewhat ahead of normal, perhaps one week to ten days.

Prospects are good for a satisfactory growing season, at least in the early part. Soil has plenty of moisture at present and weather has been quite favorable to a good fruit set.

H. A. Mostrom

Alfalfa Needs Winter Protection

Wilfred Martel of Ipswich was persuaded, last fall, to cut a plot of alfalfa, one rod by four rods. In May, at a distance of fifty feet the cut section can be spotted. Winter killing occurred because of the lack of mulching which nature demands. If alfalfa is denied a winter protection the roots will die out.

F. C. Smith,
County Agent

FACTS NOT FANCIES

(Continued from page 1)

Pinch the soil lightly, barely covering the seeds for the best results.

Peaches will once again mature in Essex County this summer (July frosts permitting!)

Round About the County

In Prospect

Arnold M. Davis, State Extension Horticulturist, will be in Topsfield at the new library on Thursday, June 11, to discuss general gardening.

On June 22 he will discuss herb gardens, their culinary value and their importance as garden borders, at Manchester.

These meetings will be held at 2.30 P. M.

Miss Grace B. Gerard, State Specialist of the Massachusetts State College, will conduct a meeting for the home accounts group in Peabody at 10.30 A. M., June 5. This will conclude a series of meetings on budgeting family incomes, and will be held at the Knights of Columbus Hall.

On June 5 and 19 Mrs. Effie McEwan of West Newbury will present nutrition facts to a group of young mothers in Topsfield, at the High School.

Continuing

Mrs. Mary M. McIntire, Home Demonstration Agent, is giving instruction in furniture renovation and chair caning to patients of the Essex County Tuberculosis Sanatorium on Friday mornings each week.

Clothing classes at the Sanatorium are also continuing on Monday and Thursday mornings under Mrs. McIntire's supervision.

Concluding

The enterprising women in Gloucester who have been re-upholstering wing and club chairs, renovating rush-seated rockers, and substituting a flourish for dull and stained woods of antiques, completed their task on May 21. The chairs, all of which are as good as new, from springs to coverings, will be exhibited at this School on June 24.

Better Homes Day

Annually the women in Essex County who have participated in Extension work, meet, compare notes, and are entertained by Mrs. Mary M. McIntire, Home Demonstration Agent in the county. This year they will assemble on Wednesday, June 24 at this School. The morning program will start at 10.30.

Of primary interest are the two speakers of the day: Mrs. Marion Rudkin, of Beverly, whose fame as a stimulating speaker is widespread in Massachusetts; and Miss Hilda Hinkley, Librarian of the Women's Reformatory at Sherburne.

Exhibits of clothing and furniture, examples of the work carried on in Extension classes, will be on display.

Miss Ruth McIntire, State Recreation Specialist, will be present.

Lunches may be eaten on the School campus.

The Extension Department extends a cordial invitation to all women interested in the achievements of its services to attend its Better Homes Day.



4 - H CLUB NEWS



4-H Room Improvement Contest

Girls who plan to renovate a room at home during the summer months should enroll in the state contest.

The room should be visited by the girls' club agent before changes are made. Each girl may then make as many changes as she wishes. A copy of "My Own Room" bulletin will be sent each girl who chooses to do over her own room and other helpful literature will be sent if a different room is chosen for improvement.

In the fall each room will be visited again by the club agent. The girls who stand highest in the county in this respect will be candidates for state prize ribbons.

These factors will be considered in the judging:

Amount of improvement made.

Amount of work done by club member.

Total cost of improvement made.

Appearance of room after improvement.

Written account of experience.

(Scribbler suggested)

Record of work done, cost of each item.

No girl should feel discouraged because of a small amount of money being available for improvement. This may be an asset since she will necessarily have to be more clever in the use of these limited funds.

All rooms should be ready for final visits by October 15. Get in touch with your county office if you know any girls who wish to enroll.

4-H Club Leaders

It is very important that all entry blanks for 4-H Clothing, Food and Home Furnishing contests be sent in immediately.

Let us remind you again that the date for these contests is Saturday, June 6 and your early attention to entry blanks would be appreciated.

News Reporters

It would be greatly appreciated if the club news reporters would respond to our call for news that can be published in our paper.

We need your cooperation. Let's hear what your club is doing.

V. A. Bisbee

4-H Club Exhibit

4-H Club exhibit time is once again before us. Clubs are now finishing up their projects and making preparations for a final exhibit of the work accomplished during the year.

All club members who have completed their requirements are eagerly looking forward to the time, for they will receive their 4-H pins.

Plan to visit the exhibits in your own towns. Announcements of their dates will be printed in local papers.

Canning Clubs

Our goal: a canning club in every town for 1936.

Are you having a garden this year? If so, you will surely want to join a canning club for the summer. By joining you will be doing something worthwhile in your leisure time and it will be fun too.

Club members—even if you aren't interested in joining a club yourself perhaps you know someone who is. Why not help us by getting them to join?

V. A. Bisbee

Red Rooster Poultry Club

The Red Rooster Poultry Club of Saugus has conducted several contests during the year which have inspired competition and good sportsmanship among the club members. Worthwhile cash prizes have been given to the winners. The money for this purpose was given to the club members by a friend who resides in another state. During the year a poultry raising examination was held and three poultry house improvement contests. At the annual exhibit in June the club members will receive prize money for the best individual exhibits.

Paul Corson,
4-H Member

Mrs. Marion Rudkin, of Beverly, will entertain the 4-H girls who are gathering at this School on County Contest Day, June 6.

Sewing Machine Free

Again this year a sewing machine will be given away to a 16 year old 4-H club girl at the Brockton Fair. There will be a county contest sometime during the summer to select several girls who may compete in this contest. This is a fine opportunity and by knowing so far ahead many girls will have a chance to try out for this grand prize.

V. A. Bisbee

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

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HATHORNE, MASS., JUNE, 1936

NO. 6

Ice Creams

Most any sweet, creamy, frozen concoction is called ice cream. Yet what differences there are in ice creams. There are ten-cent-a-pint grades and there are others commanding four times that. All creams are equally pure and wholesome, whatever the cost.

Then what is the difference? Simply this: the amount of butterfat, the source of ingredients, and the amount of air incorporated in the cream.

Butterfat: The state law requires that ice cream sold commercially must contain at least 10% butterfat, and that is the percentage in the cheaper ice creams on the market. Most of the regular creams contain about 14% butterfat, but some of the smoother, creamier mixtures run as high as 20%. (Butter itself is only 80% butterfat.)

Source of ingredients. The cream is the expensive ingredient of ice cream and is obtained from different sources. The fresh sweet cream from local dairies is the most expensive and a cream remade from butter and skim milk is less expensive. All mixtures are equally wholesome.

Amount of air incorporated. Practically all ice cream has as much air as liquid frozen into the finished product, and the less expensive packages may have much more air than liquid. Since ice cream is sold by measure rather than by weight it makes little difference how much air one pays for.

Since most of us buy ice cream for the taste as it goes down, that sense of taste serves as the best guide. It is all wholesome food, and varies only to suit your taste and pocketbook.

Ralph H. Granger,
Apprentice Instructor

4-H Gift Booth

Do you know any boys or girls who wish to sell hand-made articles in the 4-H Gift Booth at Camp Vail this fall? All samples should be in the state office by July 1. If members are interested they may get in touch with their club agent or Miss Marion Forbes or Mr. Harley Leland at the State office, Amherst. Completed articles for sale do not have to be ready until August 30.

BETTER HOMES DAY

Wednesday, June 24
At This School

The New Athletic Field

Field work actually commenced on the new athletic field on May 1 with a foreman and a small crew of W. P. A. workers. The first work consisted of removing stones from fields and



woodland. The following day a power shovel arrived and the work of creating new deep, straight ditches to remove the water from the field site began in a vigorous manner. Since that time the work has increased rapidly and the crew has been extended until at the present time about 40 men are at work on the project.

At the present writing (June 15) the entire field has been cleared of trees and many of the stumps removed. The loam and peat are being rapidly piled to be later used upon the stone foundation. The size of the field (over four acres) is now very apparent with all of the trees and other obstructions removed and the work will go on rapidly. In fact, one of the main diagonal drains is practically completed, and this, with the heavy stone fill, will insure a fine, dry field.

One of the outstanding values to the School will be the additional land made available by the drainage system and also the additional land which will be cleared of stone piles and field stone, thus adding much more working area to our valuable farm.

Facts — Not Fancies

There are two types of insects: Those that chew and those that suck. The former leave a lace-like pattern in the leaves and may be controlled, generally, by spraying with arsenate or lead. (Calcium arsenate for vegetables). Sucking insects, on the other hand, produce no visible evidence of injury until the plant, sapped of its juices, begins to wilt. These are controlled with nicotine sulfate and soap. (Soap makes the nicotine stick to the insect's body). A third type of insect—which bores its way through plants—is more difficult to remove. It is necessary to split the stalk of attacked plants, locate the borer, remove, and destroy him.

Two of the most satisfactory ground cover plants which can be transplanted now are wood violets and the hay-scented fern which grows wild in hot, sunny, pasture lands.

Deciduous hedges, hedges of private and other similar materials should be pruned very heavily now so that new growth is encouraged. If this is done hedges will be in good condition for the balance of the season. Late pruning some time in August will also be necessary.

As the garden chrysanthemums start to develop upright stocks these can be pinched back. Pinching back makes the plants more bushy and more uniform in their flowering habits. It is also recommended for such garden flowers as zinnias, marigolds, and other plants which develop first of all one large flower and later get around to bush out with several other flower sprays.

Mildew will soon begin to show up on roses, asters, zinnias, and plants of that type. This is probably most easily controlled by dusting the plants with sulphur. For this purpose use a good grade of dusting sulphur and if possible apply it with a mechanical duster.

Divide iris immediately after bloom for flowers next year.

Local Leaders' Camp

The local leaders training camp will be held at the Massachusetts State College from July 24 to 31.

Club agents are interested in procuring at the earliest convenience, the names of those leaders who desire to attend. Essex County is allowed fifteen leaders this year in addition to those who wish to go at their own expense. First choice will given those leaders who have not previously attended. This will enable a larger number of leaders to derive a benefit from the splendid program outlined.

H. J. Shute

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION
SUBSCRIPTION 25c PER YEAR

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Secretary, R. H. Campbell, Topsfield

Calendar

June 22—A. M. Davis at Tuck's Point, Manchester, 2.30 P. M. Subject: Herb Gardens.

June 24—Better Homes Day at this School. Morning program at 10.30. Speakers: Mrs. Marion Rudkin of Beverly, and Miss Hilda Hinkley, Librarian of the Women's Reformatory at Sherburne.

July 27-31—Summer Conference for Vocational Agricultural instructors of Massachusetts at Amherst.

July 27-31—Farm and Home Week at Massachusetts State College, Amherst.

Summer Sustenance

This of course is not always possible but certainly there are some cold weather foods that we might forget for awhile and get our summer foods to the front.

Why not serve cold meats frequently? Make your meat loaf early in the morning before it gets hot and slice cold for the evening meal. And be sure to cook meat loaf slowly and thoroughly. Do you sometimes use a combination of meats in the loaf instead of all beef and have you ever buried whole hard-boiled eggs in the center of the loaf and enjoyed the appearance when you sliced it? Buy a whole or half ham, cut off a slice to broil today (thereby getting it cheaper than when buying a slice separately), boil it and if desired, bake it

with brown sugar and cloves and serve this cold later in the week. Pineapple or other fruit juices for basting the ham while baking gives an excellent flavor. The left-over from this piece of meat may also be used interestingly. Chopped or ground ham in creamed eggs or macaroni and cheese, or ham omelet or scrambled eggs, ham timbals, stuffed peppers or sandwiches are some suggestions.

Corned beef or any roast served cold seems appetizing in very hot weather. Canned ox tongue is rather expensive but buy a fresh or pickled tongue and boil it yourself. Don't be misled by the most unattractive heavy skin on the outside—this peels off easily when the tongue is cooked.

Salads are indispensable

in hot weather. Try to vary your greens as well as the filling of the salad. Water cress may be available in the nearby brook and don't forget that raw spinach is a most delicious salad green (or sandwich filling). Salad plates, several types of salad individually arranged on the same plate, are new and attractive. Try a chicken salad, tomato stuffed with a raw vegetable, and a section of cucumber from which the inside has been scooped, the cavity being filled with stalks of asparagus and garnished with pimiento or radishes.

I think even men are learning at last to enjoy and see the value in salads.

Hearty sandwiches are much in favor for supper or lunch in the summer and the sandwich loaf isn't half as difficult as you might imagine before trying it. Remove crusts from a whole loaf of bread (save for bread pudding). Cut the loaf into 4 thick slices the long way of the loaf. Use fresh salmon and celery for number one filling, egg salad and lettuce for number two, and ground olives and pickles for three. Frost entire loaf with cream cheese and decorate with olives or radishes as desired. If it is not a party meal you might use cream cheese as a filling and not frost the loaf. Be careful to have fillings moist or succulent and don't overdo the cheese.

Don't fail to take advantage of the fresh-from-the-garden vegetables and fruits when they are available. Vegetable and fruit plates are great favorites. Our fruits make the best foundation for desserts in summer. Shortcakes are next only to frozen desserts and fruit whips are delicious.

With all this talk about cold foods let us remember that a meal is more cooling and healthful if there is at least one hot dish. This may be a hot vegetable, breadstuff, or beverage. A small cup of hot soup served before the chilled salad or cold meat starts the meal off right.

We must eat in hot weather, even if it is "too hot to eat" but let's eat sensibly and give the cook a vacation from the hot stove once in a while.

Ruth Emerson,
Foods Department

Comfort and Beauty In Furniture Arrangement

In arranging furniture in a room, if the comfort of those who are to use the room is considered first, one will have gone a long way toward making the room attractive in arrangement as well. In other words, if Father enjoys a certain comfortable chair very much, and if he also likes to put his feet up on a footstool when he settles down for a restful evening, then he should have that chair and footstool placed in a convenient location with a table nearby for his books or his magazines, and a lamp for a good reading light. If he is especially fond of the radio, then perhaps this could also be placed near his corner of the living room. Also, if Mother likes another type of easy chair, which is especially comfortable for sewing, then that also should be placed with a table conveniently near for her sewing basket and with a lamp near for a good direct light.

There are a few general rules one can follow in arranging furniture which will further add to the attractiveness of the room. The first rule is an oft-repeated one, but one which still needs to be enforced more generally: place the main articles of furniture, or those which are not considered easily movable, parallel with the walls, not across a corner or diagonally in a room. Movable objects only may be placed diagonally. This rule also applies to rugs. The second general rule is: balance a tall piece of furniture on another side of the room with a picture, wall fabric, or possibly with hanging shelves for a few books and bits of bric-a-brac. Another rule: balance heavy articles of furniture so that they will not all come too near together in the room, and remember that actual weight does not count, but it is the appearance of weight that has to be considered. Sometimes colorful overdrapes at a window may give quite a feeling of weight.

It is also in good taste to have a center of interest in a room, if possible, such as a picture over a mantel, the colors of which are repeated in other parts of the room through upholstery or curtains or bits of pottery. An attractive grouping of furniture around a fireplace or around a group of windows may make these, also, become such centers of interest.

And lastly, let us try to eliminate all unnecessary articles of furniture which clutter a room and keep it from being restful.

Margaret R. Harris,
Instructor in Related Arts

Farm and Home Week

M. S. C. — Amherst

July 27 - 31

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

JUNE, 1936

STUDENT EDITORS

Homemaking Department

Helen Chase, Newburyport
 Florence Hirst, Methuen
 Phyllis Thompson, Saugus
 Ruth Riley, Lawrence

Special
 Senior
 Senior
 Special

Agricultural Department

Leonard Duratti, Swampscott
 John Marshall, Danvers
 Sidney Johnston, Lynn
 James Cashman, Peabody
 James Keane, Nahant
 Lewis Norwood, Rockport

Sophomore
 Sophomore
 2X-Y Z
 Junior
 Junior
 Senior

DEAN MESICK, SPEAKER

"The work of the Dean's office has progressed by adaptation to changing trends and conditions. An attempt has been made to maintain, in spite of increasing numbers, personal relations between Dean and student and to encourage throughout the College a sense of shared responsibility."

At a recent assembly in the Homemaking Department Miss Lovett introduced Miss Louise Mesick, Ph.D., Litt.D., Dean of Simmons College, as guest speaker.

Miss Mesick gave her talk on Professional women and how they fit into the business world. She said, "All girls should be trained professionally and in all fields. They should build up standards and learn that service is service; and remember that the uneducated person is one who stops studying after graduation."

They should have many interests outside, also, to branch into; learn to do something other than their profession; try to create a hobby, for it makes life much more interesting; and build up self-respect, which includes three main points: 1. Be responsible. 2. Choose your friends carefully. 3. Be enthusiastic."

PT

MEMORIAL EXERCISES

Memorial Day exercises in the Homemaking Department were held in the assembly hall, Friday May 29. A very appropriate and interesting program was presented by the Freshman B Division. The following program was carried out: Salute to the Flag School
 Song, "God of our Fathers" School
 Reading from "Makers of History"

Reading, "Memorial Day" Ruth Hoyle
 Song, "Keep the Home Fires Burning" Olive Purdy
 Freshman B Division

Reading, "Decoration Day" Eleanor Hoelzel
 Reading, "Heroes" Margaret Spinney
 Song, "Star Spangled Banner" School

FH

EXCERPTS FROM STUDENT REPORTS

"We spent four and one-half days spraying fruit trees. One day we had to skip because of a strong wind. The day was perfect otherwise but to have attempted spraying in that gale would have been foolhardy."

Walter Alley
 School Fruit Division

"There are twelve boys including myself who work at this camp. They are all good workers. We have a state forester over us. The work is not hard and if we work steadily time passes quickly."

Carroll Killillae CCC
 Underhill Camp, Essex Junction, Vt.

"One day I came home and found that my neighbor had a swarm of bees in her yard. I didn't have a hive ready so I took a frame of honey and two frames of wax from one hive and four frames of wax from another hive and used them as a makeshift hive for the swarming bees. I put on my father's bee hat and a pair of leather gloves and began my task, first putting the hive in front of the swarm and then shaking the bees off near the opening of the hive. They went in immediately. I saw the queen but was too nervous to catch her and clip her wings. Later that evening I brought the hive home. I now have three hives. The swarm contained about five pounds of bees."

J. Arnold, Gloucester

"I used Geraniums, Marguerites, Sweet Alyssum, Marigolds, Ageratium, Petunias, Fuchias, and Lobelia in making up baskets and pans for Memorial Day. I restocked the showroom and waited on customers on Friday. Next week I will get the house in order and plant geraniums in the field for stock plants."

A. Trask, Peabody

Editor's Note: These excerpts are taken from the required weekly reports sent to the School by boys on summer projects.

STORY TELLING AT TOPSFIELD

The Seniors have had as a part of their English assignments, the telling of children's stories. Some of the students were given the opportunity to display their talents in Topsfield when they had a story hour with nearly fifty children between the ages of six and ten.

The following program was presented: "The Gingerbread Man"

"Raggybug" Mildred Humphreys
 "Mrs. Tabby Gray" Arlene White
 "The Open Gate" Betty Johnson
 "Españimandas and His Auntie" Arlene White

"Little Black Sambo" Betty Johnson
 Josephine Hogan

FH

PROJECT NOTES

Lawrence Shanks is carrying on a poultry project at his home in Essex and is working for his uncle in Marblehead.

Ernest Tarbox, proprietor of Tarbox Gardens, is developing a rock garden at his home, 15 Hayden Rd., Saugus. He has circulated an attractive printed folder to stimulate summer business.

The Nunan Brothers are expanding their nursery and greenhouse business on the Newburyport Turnpike in Saugus. John Natti of Rockport, is building a new laying house and incubator cellar as a part of his summer project.

Palmer Jones, formerly of Salem, is working at the Harmony Grove Greenhouses. He is also developing his home grounds in Boxford.

Frank Stacey is working for James Skinner, the florist, and a graduate of this school, of Marblehead.

Gary Sano and Christy Mavros are at Sim's Farm, Cliftondale.

Clifford Nelson of Methuen is carrying on a poultry enterprise with his father.

Miss Hope Crombie is employed at her father's greenhouse in Beverly.

Gildo Santin is dividing his time between the Sears farm in Danvers and the Haves estate in Peabody.

Ernest Santin is at Walke's in Salem. These boys have a small orchard project in Beverly.

SCHOOL ACTIVITIES

The premium list for the student's fall flower show to be held at the School in October will be out by July first. The committee has added three new classes, namely: Boutonnieres, Corsages, and Decorative Baskets. It is applying for the use of the School gymnasium for exhibits.

F. F. A. Tour

For several years the F.F.A. organization has conducted a summer tour, visiting several student projects and winding up with a baseball game and swim at a nearby resort. Last year the tour extended through Beverly, Ipswich, Essex and Gloucester. Six projects were visited and the late afternoon was spent at Stage Fort Park, Gloucester, where a clam bake and corn roast were enjoyed. A baseball game between students and members of the faculty was a feature of the day. A similar tour will be conducted this year in August.

Silver Cup

George Morrow, a student of this School, was recently awarded a silver cup at a Newburyport hobby show for his interesting display of a desert garden.

Blue Ribbon

The School was awarded, on June 11, a special blue ribbon at the Boxford Flower show.

CURRENT EVENTS PROJECTS

Since the middle of April every girl in both Senior and Junior classes has been scrambling about for news clippings for her current events project.

Each girl was given six maps including North America (covering Canada, Mexico, and Central America), Europe, the United States, Africa, South America, and the World (covering both the Atlantic and Pacific Oceans, Asia, and Australia.)

Each clipping had to be of current interest and of the type of news released by the Associated Press or the United Press. The clippings were sorted according to the maps and mounted on white paper. With this done, all places referred to in the clippings were located on the maps. Following this, the names were lettered on the map and the papers put together in booklet form. Not only did the girls gather much information of what was going on but they discovered many strange and little known places.

PT

ALFRED CIPOLLA

Ten years in 4-H Club work and still an enthusiastic leader, Alfred Cipolla of Haverhill, a graduate of this school, has a record which few can match in Essex County. Cipolla is now directing the organization of new 4-H Clubs and training leaders under the National Youth Administration. Thirty-four young men and women have been assigned by Mr. John J. Griffin (County Administrator of the National Youth Administration) to extend 4-H Club work in Essex County. Because of Mr. Cipolla's enthusiasm and knowledge of club work, he was chosen to assist County Club Agent, Horace J. Shute, in this work which involves 1200 new 4-H club members.

When a lad of thirteen, Alfred signed up in a 4-H Garden Club conducted by Mr. Ernest Howard, former Agricultural Supervisor in Haverhill. In 1929 he entered the Agricultural School to further prepare himself in gardening and poultry. While at the school he made a notable record in academic as well as agricultural accomplishments. During his Senior year he won first prize of \$125.00 in the Swift Essay Contest. His essay, "Feeding the World" was adjudged the best submitted that year in this nation-wide contest.

Cipolla has continued his interest in club work and has been assistant Supervisor of garden clubs in Haverhill. He has attended the 4-H Club Camp at the Massachusetts State College several times and was selected Massachusetts Delegate to the National 4-H Encampment in Washington, an honor accorded only for outstanding accomplishment.

Cipolla has been instrumental in developing a county-wide interest among the members in promoting banquets, field days and various contests among 4-H Club groups. He assisted Mr. Shute in organizing the 4-H Service Club, a county organization whose members have been in club work three or more years. Serving two years as president and two years as vice-president of this county 4-H organization has given him the necessary experience to carry on this work with the National Youth Administration.

PARENTS' DAY

Parents' Day — the long awaited day, finally arrived. This day is reserved for the parents and friends of the girls so that they may visit "Essex Aggie" and it is also the closing of the school year.

The Senior B's drew a floor plan of the living room and worked out a color scheme for the room. They obtained samples of upholstery and wall papers, and from their study of Home Decoration with Miss Harris were able to pick out colors that would blend together and colors that would be right for the size of the living room. Costume Design, Home Decoration notebooks and cookie cans covered with braided and twisted colored crepe paper were on exhibit in the art department.

Foods

Miss Emerson's High School A class and Miss McJunkin's High School B's had a contest in setting up tables. Each table was set with identical doilies and dishes. The food preparation, choice of foods, color scheme, and general appearance of the tables were what the judges considered when they decided the winners.

Clothing

In Mrs. Dunn's home room were dresses and suits made by the Seniors and High School Specials. Miss McJunkin and Mrs. Clapp had on exhibition the clothing work done by the Freshmen and Juniors.

On the bulletin board were silhouettes of "The Sketch Book" done by Miss Clarke's Junior B English class. The Juniors and Seniors have been making current events notebooks and these were on exhibition in the library as well as a Freshman citizenship problem on thrift. They had six maps and each map was accompanied by twelve current events items which were supposed to be authentic news. Home projects by Phyllis Marks and Barbara Clark correlating economics with food were also on exhibition.

Home Nursing

Mrs. Roundy had a crib and high chair of the 18th century to contrast with a modern crib and high chair. Mrs. Roundy also showed the contrast between old and new methods of hot applications.

Miss Chase had charge of a very interesting science exhibit. Two vanity tables were set up—one representing 1890 and the other 1936. The first had on it only the three essentials: talcum powder, rose water and glycerine, and chamois. The 1936 vanity table had all the articles found in modern days. By means of charts, the contents of lipsticks, rouges, powders, depilatories, creams, and mascaras were revealed. Charts also showed what these articles can and cannot do for the skin. Home-made creams and their formulas were on exhibition. There was a board exhibit of skin structure. The articles used were furnished by the Ropes Drug Store and the statements made regarding cosmetics were obtained from Consumers' Research in New Hampshire.

Story-telling to the children who came to visit the school was an interesting part of the morning program. The stories were "Wylie," "Little Black Sambo," "The Nightingale," and "Raggybug," told by Mildred Humphreys, Josephine

Hogan, Freda Peterson and Anita Granville respectively. This followed a demonstration on pastry given by Lena Tela.

Fashion Play

In the afternoon the students presented a play entitled "Three Generations" which was written by Miss Lovett, a member of the faculty. The play depicts the changes in home-making. Those in the first scene, 1895, were Helen Chase, Mildred Humphreys, Ethel Webb, Mary Lafond, Priscilla Preston, and Hilda Putnam. The second scene, laid in 1905, was portrayed by Bertha Bowers, Phyllis Marks, Edna Goodale, Doris Cooke, Mildred Hennigar, and Gertrude Lawton. In the third scene, 1936, were Ruth Peterson, Mary Minichello, Frances Carty, Eleanor Sears, Anna Gioco, Claire Moran, and Emily Currier. After the play in the afternoon there was a fashion show in which girls from all classes took part. Ruth Dixon was director of the fashion show and pointed out interesting details of the dresses.

The parents and friends brought box lunches. After the play, punch, cup cakes, jelly rolls, dropped cookies, and cream puffs, were served the guests. The freshman girls served under the supervision of Miss Richardson.

HC

ALUMNI NOTES

Leavitt Moulton, superintendent of the Hobson Estate in Beverly, has Fred Anderson, '33, and Richard Estes, '36 in his employ. Mr. Moulton is also enrolled as a student at the school.

George Garland, '22, visited the school in June. Mr. Garland is a travelling salesman for the Economy Fuse Company, covering the New England territory.

Mr. and Mrs. Dorrall Gordon Berry are rejoicing over the birth of Dorrall Gordon, Jr., born in May.

Nathan Hale, '28, E. Parker Ryan, '24, Thomas Snelson, '30, R. Milton Snow, '32, a graduate of Massachusetts State College this year, and Clarence Tibbetts, '27, are all employed by the United Farmers' Dairy System at Charlestown. Mr. Tibbetts is superintendent.

Chester Dunn, '33, is herdsman at Roughwood Farm, Chestnut Hill.

ELECTION OF OFFICERS

On May 29 the girls nominated Echo Club officers for the coming year. They were as follows: Pres., Barbara Clark, Helen Lucas, and Yolana Scamperino; Secretary, Eleanor Hoelzel, Kay Johnson, and Ellen Willis; Treasurer, Edna Bowers, Mary Lafond and Kay McLaughlin.

At Assembly on Monday, June 1, Rita Pasquale, the retiring president, announced the names of the newly-elected officers: President, Helen Lucas, Peabody; Secretary, Kay Johnson, Salem; and Treasurer, Mary Lafond, North Andover.

The members of the nominating committee were: Helen Chase, Ruth Peterson, Freda Peterson, Mildred Humphreys, Madelyn Mathison.

RR

Timely Thoughts

If the first spray for the control of railroad worm is very thoroughly applied to all trees, a second spray may not be necessary.

By sprinkling superphosphate in the gutters and on the manure pile, the number of flies will be much reduced and escape of ammonia from the manure prevented.

Succession plantings of all vegetables should be made this month if you are to have an abundant home-grown supply until frost in the fall.

For highest yields and lowest labor costs, give the corn field shallow cultivation sufficient to control weed growth and thus prevent competition for the water supply available during the most rapid growth period, namely July and August.

Experiments on strawberry bed renovation have shown conclusively that best results follow mowing off all the old leaves immediately after the crop is harvested. When the ground is moist and the leaves dry, they may be burned to help control insects and disease. The earlier this treatment is given the better the results obtained.

A mulch of marsh hay or straw around the raspberries will aid in conserving moisture and checking weed growth.

Rotenone preparations are effective for many chewing and sucking insects on a wide variety of plants. Get acquainted with this insecticide.

Water lawns long enough so that the soil will be wet down to a depth of six inches.

Crab grass in the lawn is an indication that the regular lawn grasses are dying out. Plan to remedy this condition by summer feeding and fall renovation.

The Wearing O' The Flowers

You will wear them this season if you are smart.

A crisp, fringed flower is made of bias pique tubing and sealing wax.

Cut twenty-five five-inch lengths of bias pique tubing and dip the tip ends in melted sealing wax to finish and prevent fraying. Make bundles of five of each of these lengths, wind a thin wire several times around the middle of each bundle leaving short ends of the wires for stems. Place these bundles in chrysanthemum formation, wind the stems together (not more than a quarter of an inch in length), and attach a flat leaf or two made of oilcloth or felt to match the sealing wax.

I would suggest dipping the ends of a white pique flower in navy blue to be worn with a pink checked cotton dress; or a yellow dress with brown pique flowers dipped in yellow—with yellow leaves. Plan colors that will accent your costume in the smartest way.

Myrtle R. Dunn,
Instructor in Clothing

Better Housing For Chix

The second of a series of three replacement buildings has been completed at the School by Willis Anderson of the farm mechanics division. These buildings are designed for diversified use, in order that they may be occupied every month in the year. Many brooder houses, both of the permanent and colony type are in active use only three to nine months of the year, making the overhead cost relatively high.

The new buildings are twelve feet in width and sixteen feet in depth, with shed roof construction. They have been developed as suitable for brooding, for laying houses, and as temporary quarters for cockerels being held for broilers or breeders, or for odd lots of birds being brought in from the range before final sorting. The first building, erected in 1935, was not completed until after the brooding season, so the first birds to occupy it were fifty pullets brought in from the range in August. These birds were trapped, and in late December a wire partition was placed across the pen and the thirty best birds were retained, fifteen on a side for single matings for the breeding season. In March these birds were transferred to other houses to fill vacancies created by culling and mortality, and a brooder stove was set up in preparation for baby chix. At the present writing two different lots of chix have been brooded there since that time. The comparatively large floor space is adapted for starting 200 winter broilers (total confinement), 250 early hatched chix, or 300 medium or late hatched individuals. A maximum of 50 laying pullets may be housed in these quarters.

Other features of construction not previously mentioned are as follows: the house is set upon nine wooden posts, equally distributed under three 4x6 timbers; sides are of Oregon fir novelty siding; floor of a single thickness of good quality matched fir flooring (not so good insulating value as double flooring with paper between, but free from wide cracks, warping, and very easy to clean—no more expensive than double flooring of cheap materials); ceiling insulated with homasote for extra warmth; rafter ventilators front and rear; windows in rear and at sides; two sliding muslin screens on the front; removable nests and roosts; droppings boards arranged to hook back out of the way during the brooding season; trap door in ceiling to permit storage of sash in hot weather and brooder pipe when not in use; and a permanent 5" soil pipe flange for the brooder pipe outlet. The 1936 house differs from the one just described by having two double sliding sash in the front in place of muslin screens; a "wired-in" roosting pit to eliminate droppings boards, and storm sash on the rear windows be-

Garden Chat

"Dark Green Bloomsdale" proved to be the best Spring variety of Spinach to plant out of some twenty different varieties and strains. This variety was most rapid in growth, excellent in quality and appearance and most outstanding. The recommended Fall variety of "Virginia Resistant Savoy" bolted to seed first and therefore should not be used as a Spring planting.

"Rueil Bloomsdale Longstanding" was second. This French variety had broad rounded leaves, slightly savoy and resembling the older variety, "Gaudry Thick Leaf".

"Standwell" and "Hollandia" were next outstanding in preference. Both had smooth, arrow-shaped leaves, were lighter green in color than "Bloomsdale" and were prickly seeded.

"Long Standing Bloomsdale" was next in line and is the recommended summer planting strain of "Bloomsdale" for hot weather. Plant seed more thinly for best results.

"Juliana" looked well among the other varieties in this study. Being much slower in growth it did not have the leaf development that most of the other strains possessed. The leaves were small, dark green and crumpled, and stood well from bolting to seed.

Flea beetles are getting in their licks while the leaves of potatoes, tomatoes, pepper, eggplants, squash, beans and other sensitive and succulent plants are tender and young. The flea beetle is a small black insect that may be seen hopping about the above named plants. They may be detected by the small holes that they have chewed in the leaves. Control this little pest at once by using a stomach poison, such as Calcium or Lead Arsenate. It is well to add some Bordeaux to prevent blight from taking advantage of the damage already done by Mr. Flea Beetle. Use 2 level teaspoonfuls of Lead Arsenate or 4 level teaspoonfuls of Calcium Arsenate per gallon of water and 2-3 ounce of Bordeaux mixture.

The home gardener can well afford to water his vegetable crops with water if the dry spell continues that we were confronted with the first of June. Remember that plants take their food in form of solution and unless we have water available to dissolve this food, plants cannot make their proper growth due to food shortage.

Carleton M. Stearns

cause of the proximity of the roosts to the windows. The tops of the front sash come just under the ceiling level, and are protected from driving storms by metal hoods.

J. Stanley Bennett,
Instructor in Poultry

Round About the County

Concluding

Clothing classes, under the supervision of Mrs. Mary M. McIntire, Home Demonstration Agent, will come to a close in Newburyport and Salisbury this month.

In Prospect

On July 8 and 9 Miss Grace B. Gerard, State Specialist, will be in the county to make personal visits to the homes of those women who attended winter meetings to study home accounts.

On Monday, June 22 Arnold M. Davis, horticulturist, will discuss herb gardens at Tuck's Point, Manchester. This meeting is sponsored by the Agassiz Nature Club, and is scheduled for 2.30 P. M. o'clock.

Canning Classes

For those women interested in the art of canning fresh fruits and vegetables there will be classes in the County under the supervision of Mrs. Ruth Hurder Howe, temporary assistant in horticultural manufactures. Will these women notify Mrs. Mary M. McIntire of their interest at the earliest convenience. Mrs. McIntire will accordingly set definite dates, which will be advertised, for a series of meetings.

Aid for Resettlement Families

The Home Demonstration Agent of this County is visiting Resettlement Client Families in the County, with an eye to the need of classes in food preservation. The families' gardens are being checked for size and success, and individual help in canning technique will be offered those whose garden products warrant canning.

Better Homes Day

June 24 (Wednesday), is the day when women who have participated in Extension work, either as leaders or members of classes under Extension supervision, and their friends, will be entertained at this School by Mrs. Mary M. McIntire, Home Demonstration Agent for Essex County.

The program starting at 10.30 in the morning, has been designed to interest all friends of the Extension department.

Miss Hilda Hinkley, Librarian of the Women's Reformatory at Sherburne, will speak at 2.00 P. M.

Mrs. Marion Rudkin, as has previously been announced, will speak in the morning at 11 o'clock on the subject "As a Man Thinketh".

Miss Ruth McIntire, Recreation Specialist of the Massachusetts State College, is to be present.

Exhibits of clothing and furniture, the achievements of fall and spring classes, will be on display.

Mrs. McIntire extends a cordial invitation to her Extension friends to attend the Better Homes Day program.



4 - H CLUB NEWS



4-H Contest Day

Essex County 4-H club girls held sway at the Essex County Agricultural School all day, Saturday, June 6. It was the annual 4-H contest day which winds up the work done during the year. The day was one of joy and excitement as the girls exhibited their handiwork.

Clothing was judged by Mrs. Irene Pease of Springfield, former 4-H Club Agent in Barnstable County, and Mrs. Mary M. McIntire, Home Demonstration Agent in Essex County.

Food exhibits were judged by Miss Tena Bishop, Assistant State Club Leader, and Mrs. Walter Snell of Lynn.

Mrs. Leon Jordan of Groveland supervised the dress Revue, a feature of the afternoon program. Prior to the Revue Mrs. Marion Rudkin of Beverly entertained the girls in her engaging manner.

From this county contest the following representatives were chosen to compete in the state contest, held at Amherst on June 13:

Clothing: Phyllis Simpson, Groveland, Marguerite Shevenell, Groveland, Ruth Cann, Danvers.

Foods: Eleanor Hersey, Gloucester, Barbara Scott, Beverly.

The following girls received prize ribbons for their high scores in the 4-H Club music appreciation contest which was broadcast over station WBZ on Saturday, May 23:

Ruth Irene Wardsworth, Saugus; Ruth Cann, Danvers; Frances Atwood, Beverly.

Room Improvement Contest

Many club members have been asking what they can do during the summer vacation. Here is a project that nearly every girl can enter and at very little expense to the contestant.

The contest runs from June 1 to October 1, giving each contestant the entire summer vacation to do her work.

Girls entering the contest must be thirteen years of age or over. Rooms will be visited before and after improvement by the club agent who will give as many suggestions as possible and helpful printed material.

There are two classes in the contest: a two and five dollar class. All improvements made must be kept within the range of either of the classes. An accurate record of all expenses will naturally be kept and a story of experiences handed in.

Prizes will be awarded to those girls whose improvements are the most outstanding.

Exhibits

Many local exhibits have been held this year throughout the county with some of the most outstanding work we have ever seen. Two records submitted by individual clubs deserve special mention:

1. That of the Onwego Clothing Club of North Andover which turned in a perfect attendance record at every meeting. In addition each girl in the club completed the required project work making Onwego a banner club. Miss Doris Albrecht is its leader.

2. That of Evelyn Thurlow of Groveland, who has completed her fifth year of perfect attendance at club meetings. For this she has received an award offered to that member whose club spirit is the most outstanding in her town. Mrs. Leon Jordan is the leader of the Groveland club.

Note: It is the interest created by local leaders which produces records like these. Good work, Club Members. Keep it up.

H. J. Shute,
County Club Agent

Canning

Club members—with summer vacation around the corner why not join a canning club and make use of all your spare time? There is satisfaction in canning fresh fruits and vegetables from your own gardens; and a joy in having your store room shelves filled with a canning exhibit for use during the winter months.

The Topsfield Fair will give you an opportunity to exhibit your products and a chance to earn some money. Also the Ball Jar Contest and the New England States' Canning Contest will give more prizes.

The requirements for the first year are as follows:

24 jars of fruits and vegetables, including some tomatoes and string beans. Keep a record of the canning done and submit it to your club agent at the end of the season.

One girl will be chosen to go to the State Camp next year. Certainly that prize is worth working for.

We hope to increase our enrollment. Why not get interested in this project? Get in touch with Miss Vera Bisbee, Assistant Club Agent, Hathorne, if you wish to join a club. Material with rules and canning information will be sent you as soon as you enroll.

V. B.

Members who are interested in entering the contest are requested to communicate with the Assistant Club Agent, Miss Bisbee.

V. B.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 17

HATHORNE, MASS., JULY, 1936

NO. 7

Taylor

The New Red Raspberry

After an experience of two years in studying this new valuable variety which originated at the New York State Agricultural Experiment Station at Geneva we are prepared to endorse it unqualifiedly. It is a large long berry of a beautiful red color. It appears to be a good shipper and the quality is very fair with a spright-

Essex County Fair In 1936

It will be the Essex County Fair at Topsfield this year and the dates are September 16th, 17th, 18th, 19th according to a recent decision of the Executive Committee of the Essex Agricultural Society.

This resumption of the old name in use up to 1927 is in line with the pol-

Facts—Not Fancies

Zinnias may be encouraged to grow large, showy blossoms if the practice of disbudding is exercised. Disbudding is accomplished by picking out all of the small side buds which develop in the axis of the leaves. Growth in the flower head is thus intensified and one perfect flower may be developed in lieu of a quantity of small and ineffective blossoms.



Essex Wins

ly raspberry flavor. It is to be hoped that the stock of plants of this variety will be sufficient so that in a very short time it will be available for dissemination amongst gardeners and commercial growers who value high quality.

Professor Ralph H. Donaldson of the Massachusetts State College has been in the county planning pasture improvement projects for Melville Grey of Wenham and the Weathersfield Farm, Danvers.

J. Stanley Bennett, an instructor at this School, and the County Agent, F. C. Smith, recently attended a conference on poultry disease problems at the Massachusetts State College.

icy of the Society to appeal to all the citizens of Essex County for support of the Fair as a great Essex County Community enterprise.

In order to carry on an extended program of publicity and to broaden the general scope of the Fair the Society has secured the services of Robert P. Trask of Lexington as General Manager.

Mr. Trask was for many years connected with the Extension Service; he is a former President of the Massachusetts Farm Bureau Federation and has long been connected with the management of the Eastern States Exposition. He assumed office May 15th.

Every important committee is already functioning under an active
(Continued on page 3, col. 3)

Liquid manure diluted in water so that the solution resembles (in the gardener's jargon) "weak tea", is recommended as the best food for hardy chrysanthemums and should be applied in moderation.

Sulphur dust is a preventative for mildew. If used in time, before mildew appears, it is probable that the disease will be entirely eliminated. (Mildew is detected on the under side of leaves.)

Phlox are thirsty plants. Heed their appetites.

Weeds in driveways are eliminated most easily with an application of coarse salt dissolved in boiling water. (Use as much salt as will go into solution.)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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Calendar

July 27 and 28—Summer Conference of Agricultural Instructors at the Massachusetts State College, Amherst.

July 27-31—Farm and Home Week, Massachusetts State College, Amherst.

August 8—Annual picnic of Chebacco Pomona Grange on grounds of this School.

Apprentice Instructor Receives Appointment

Ralph H. Granger of Westfield, a member of the class of 1935 at the Massachusetts State College, and apprentice teacher during the past year at this School, has accepted a position as agricultural instructor in the high school at Brattleboro, Vermont. His work there begins September 1.

During July and August Mr. Granger is in complete charge of ice cream manufacture at the Farmers' Co-operative Milk Exchange in Westfield.

Professor Branch of the State College has been complying with requests on the part of Essex County Farmers for efficiency check-ups of their business.

Summer Projects

Schooled in the amenities of life, students of the homemaking department of this School are taught also the value of homemaking efficiency, as well as the importance of promoting their standards in whatever fields they may be employed.

During the school year they carry a program of what is known as a home project including work in clothing and foods, and all related subjects. The scope of this work is necessarily limited through lack of time. Such, however, is not the case when summer projects are in swing. This year the range of projects is wide.

Students are permitted either to carry projects in their home or outside, employed projects. Those electing the former this year have included the following types in their choices: planning, preparing and serving of meals for two weeks or more; renovating of wardrobes; making of garments for other members of the family; redecorating of rooms; making of curtains, overdrapes, and slip covers; refinishing of furniture; and studying of price trends in foods, recording the same in chart form.

For those who desired to be employed outside of the home the openings have proved more numerous and varied than for several years. In summarizing the work of this group it has been found that girls have been placed as waitresses and supervisors in tea rooms; cooks in girls' camps, household assistants in private homes, nursery maids, assistants in hospital diet kitchens, and there are some working in dress shops as salesgirls and fitters.

The majority of the girls undertaking projects outside the home are members of this year's graduating class. Many of their projects will become permanent positions. In the past few years it has been difficult for undergraduates to secure employment for the summer alone but the students this year have been more fortunate.

The progress of each student is ascertained in the fall through required written reports of her summer achievements.

E. M. Moore

New Athletic Field

Since we last reported on the progress of the New Athletic Field our working crew has been greatly increased. In fact, we are now working over 100 men and the work of placing the heavy stone foundation under the field is going forward in a very satisfactory manner. Friends of the School are very enthusiastic about this development which will have the double effect of giving us better stone-free fields to operate and a very firm foundationed athletic field on which to enjoy the various seasonal sports.

Shute—Messer

Of particular interest to graduates of both departments of this School and to 4-H club members in Essex County, is the marriage on June 27 of Horace J. Shute, class of 1927, 4-H Club Agent in Essex County, and Viola Messer, class of 1929. Mr. and Mrs. Shute are residing at 21 Carlton St., Methuen.

Alumni Notes

John Joseph Sullivan, class of 1924, and Miss Mary Bertha Cahill, of Providence, were married June 22, 1936.

Ralph Demuth Glaze, class of 1935, is temporarily stationed at Davenport, Iowa, with the Davy Tree Expert Company of Kent, Ohio.

Franklin Day, class of 1935, is employed by Warren Chadwick, poultryman of West Boxford.

Miss Marion Burkhardt, class of 1933, and Roland Kinlock of Methuen, were married in Springfield, June 13, 1936.

Miss Gertrude McAdoo, class of 1936, and Clyde Stead of Cliftondale, were married July 13, 1936.

Lionel Robator, class of 1927, is working on the poultry farm of C. Nelson Hardy, Essex.

D. Woodward Walker, class of 1936, was recently appointed master councillor of the Salem Chapter of DeMolay. Walker is employed at the Groton House Farm in Hamilton.

Joseph Cote, class of 1933, has permanent employment at the Danvers State Hospital as assistant to the head gardener. Summer days find him on the grounds. During the late fall and winter he will be stationed in the greenhouses.

Grange Picnic August 8

Chebacco Pomona Grange will hold its annual picnic and field day on the grounds of this School, Saturday, August 8. The committee in charge of the picnic includes Herbert Tucker of Beverly, Edward Kolhonen, West Peabody, and Dwight H. Voorhees of West Gloucester.

Among the athletic events planned is a horse shoe pitching contest, in anticipation of the State contest held annually at Springfield.

James Cole Weds

Miss Mildred Sipsey, daughter of Mr. and Mrs. Thomas Jackson Sipsey of Lawrence, became the bride of James Norman Cole at a ceremony, July 4, at the Church of the Transfiguration, the Little Church Around the Corner in New York City.

Mr. Cole is councillor for the boys living at camp Bauer, headquarters for students employed on the School farm.

ESSEX FARMER AND HOMEMAKER

JULY, 1936

CAMP BAUER NOTES

The boys of Camp Bauer, accompanied by Camp Councillor James Cole, have been participating in summer diversions. Among the most pleasant of their outings was a picnic at Canobie Lake, Salem, N. H. There they visited the many amusements. Some rode on the roller coaster while others tried their skill at throwing baseballs at the bat, and if lucky, won various prizes.

The boys of the farm department who attended were:

Percy Curtis, Jr., Rockport; Emile Oulette, Salem; Warren Killam, Danvers; Stanley Bickford, Lynnfield Cen.

Those of the garden department were: Jacob Ranta, Rockport; and Harold Dossett, Beverly.

Representing the poultry department: Gordon Hall, Ballardvale.

The boys are looking forward to more excursions.

Stanley Bickford, Student.

AN AGGIE REUNION

A welcome-home party tendered to Mr. and Mrs. Robert Lewis and their son of Fulton, New York, proved to be also an Aggie reunion as ten of the party were graduates of this School. On the occasion of Robert's visit to his parents, Mr. and Mrs. Herbert Lewis of Lowell St., Andover, a large number of friends were assembled to greet him.

The Aggie graduates present were: Roger and Walter Lewis, Mr. and Mrs. Arthur Peatman, Harold Dowding, Norman Morgan, Chandler Bodwell, Harold Rogers and Mrs. Clayton Northey (nee Helen Lewis).

ILLINOIS STUDENTS VISIT ESSEX AGGIE

A group of ten honor students of the Tolono Illinois high school visited the Agricultural School July 6 and 7. Accompanied by one of their instructors and the father of one of the students, the group was met in Boston by H. A. Mostrom, Educational manager of this School, and H. P. Thurlow. After visiting historic shrines in and about the city, they came directly to the School where supper and an evening's entertainment were provided.

On the following day a tour was made of Old Salem and Marblehead, where many of the boys caught their first glimpse of the ocean. Several places, not frequented by the casual visitor, were opened to this group through the kindness of Secretary Newall of the Salem Chamber of Commerce, Mr. Arnold of the Pioneer Village of Salem, and Mr. Tutt, Town Clerk of Marblehead.

After several hours of sight-seeing the boys made their initial dip in the Atlantic.

The group was conducted by F. A. Smith, Director of this School, H. A. Mostrom, G. E. Gifford, and H. P. Thurlow.

AMBITION

To be a help
In time of others troubles
To be a friend of friends
To be a good chum;
To be a Victor in Life's
Greatest battles,
To never be a begging,
Loafing bum.

To take all trials and sorrows
And keep smilin',
To be a man that other
Folks can trust;
To do my best to keep
The comrades cheerful,
And if I can't have riches,
Take the crust.

To do my work and do
The best I'm able,
To do my most and get all
Out of Life.
To earn my wages honestly
And earnest;
To keep the joys of God
To turn out strife.

Walter W. Hichens
Class of 1937

4-H LEADERSHIP TRAINING CAMP

One hundred and fifty Massachusetts young men and women arrived in Amherst July 16 for an eight day program of work in leadership training at the Mass. State 4-H camp. The camp was under the direct supervision of George L. Farley, state club leader.

Group discussions and crafts work were based on the general theme, the home. The discussions brought to the attention of the camp members the value and importance of the home as a unit in society. At the same time, the program was designed to give the young people training in leadership not only for activity in 4-H work, but in the every-day affairs of life.

Essex Co. club leaders who attended the camp were:

Richard Clayton of Saugus; Doris Albrecht of North Andover; Algrid Ramakika of Haverhill; Aubrey Boisvert of Beverly; Frances Atwood of Beverly; Florence Cohen of Winthrop; and Ruth Cann of Danvers.

Mr. and Mrs. John Kay of Abington, Mr. A. F. A. König of Newtown, Conn., and Lester Tomkins of the State Department of Agriculture recently visited the School goat dairy. Goat-breeders in their own right, Mr. Kay and Mr. König found the School's Saanens praiseworthy.

F. F. A. PROJECT TOUR

Thursday, August 20, is the date proposed for the F. F. A. project tour and outing. This year several projects in the Haverhill-Amesbury section of the county will be visited. The Merrimac Playground Commission has granted the use of its grounds to the Future Farmer for a clam bake and "weenie" roast at noon. The afternoon sports program will include baseball and swimming.

This outing affords members who can spare the time away from their own projects an opportunity to meet together during midsummer and observe the work of other members. The tour is conducted under the auspices of the vocational improvement committee.

On July 9, the following boys, accompanied by Instructors G. E. Gifford, K. W. Forman, A. G. Perkins, John E. Miltimore and J. F. Gallant, participated in what has come to be known as the Science Tour: Russell Kenney, Lynn; Gordon Hall, Andover; John Wilcox, No. Andover; Henry and Ted Smolak, No. Andover; Warren Towne, Beverly; Arthur Connell, Lynn; Walter Manchin, Swampscott; Leonard Duratti, Swampscott; Peer Johnson, Beverly; Arthur Dichirico, Swampscott; Robert Bingham, No. Andover; John Marshall, Danvers; Hugh Russell, Danvers; Elmer Thomas, Beverly; Ernest Tarbox, Saugus; Clayton Teague, Marblehead; Russell Burton, Saugus; and Joseph Mattera, Swampscott.

The students drove directly from the School to the Waltham Field Station which occupies the farm portion of an estate known, for years, as Cedar Hill, and located on Beaver St., Waltham. Here they visited the twenty acres of land planted to fruit, vegetables, annual flowers, herbaceous perennials, and shrubs.

Professor Paul W. Dempsey, horticulturist, explained the experiments being carried on at the Station. The work covers a wide field in horticulture, including the following subjects of general interest: Disease and Insect Control; Fertilizers and Soil Treatments; Plant Improvement (breeding and selecting better varieties of flowers and vegetables; breeding disease-resistant strains; keeping up-to-date equipment, electric heated hotbed and propagating bench; and trying out the many gadgets constantly appearing on the market); Public Education (conducting garden schools, lecture courses, garden group meetings, and Field Day—to be held August 5 this year).

After a picnic lunch on the grounds, the students made independent tours of inspection and gathered specimens for their science collections.

The afternoon was devoted to swimming, on the part of some, and the Red Sox versus Chicago ball game on the part of others.

BACK YARD GARDENER

As promised, I am going to try to give a little information on peonies. But first let me remind you again of the home flower garden and the lawn day programs being held at the State College in Amherst July 28 to 31. I am willing to wager dollars to doughnuts that you can pick up more ideas in these four days than you can put into practice in four years.

Five is about the limit of species of peonies commonly grown. Many people have peonies which do not bloom, yet they are fairly easy to grow, are hardy, and produce plenty of showy flowers in a wide range of colors.

The common names of these five species are fringed, common, Chinese, tree, and golden. The fringed peony gets its name from the deeply cut, finely divided leaves. It is the earliest peony to bloom, and after blooming, the plants die down. This one grows to 1 or 1½ feet in height and bears blood-red, fragrant flowers in single or double form.

The flowers of the common peony sometimes have a rather disagreeable odor, yet it is one of the oldest garden plants grown. It usually grows to a height of 2 or 3 feet and the common types are double red, rose, and white.

The Chinese is the largest of the common garden varieties, growing 2 to 3 feet tall. It produces flowers in clusters of 2 to 5.

The golden peony has been in cultivation a comparatively short time. There are some hybrids between this species and other forms which are not commonly available. Then the tree peony has woody stems and is quite shrub-like, growing from 3 to 6 feet in height. The flowers are large and have a wide range of color from white to crimson.

The soil for peonies should be rich, well drained, and preferably heavy loam, although sandy soil will grow them very nicely. The main thing is good drainage. A forkful or so of well rotted manure should be worked into the soil when the plant is set, especially if the soil is sandy. The only thing you have to watch out for is to keep the manure from coming into direct contact with the roots.

Set the roots ¾ to 4 feet apart each if you want real good blooms. When making the hole, be sure it is large enough so that the roots won't be crowded and have it plenty deep. The eyes or buds should be 2 or 3 inches below the surface of the soil. The best time to plant is from September 15 to October 15. Be sure that you don't plant any later than October 15.

When the flowers are growing you've got to disbud the side or lateral buds if you want large, high quality flowers.

Failure to bloom may be caused by several things. The plant may have been transplanted recently. Late planting or the use of old crowns which do not have a well developed root system cause the plant to suffer from lack of food and water. And too deep planting often leads to no bloom. Late freezes may kill the flower buds when they are quite small.

But the most common cause of failure to bloom is a fungus disease, botrytis blight, which usually attacks the buds when about the size of a pea. About the only way to get rid of this disease is to hand-pick and burn the diseased

SPECIAL DAIRY PROGRAM AT FARM AND HOME WEEK

Massachusetts dairymen will have a special program at Farm and Home week at the Mass. State College. The dairy section program is scheduled for Wed., July 29, and Thursday, July 30.

Marketing, milk control, disease control, and herd replacement possibilities will be considered. Features of the program will include a discussion of "A Disease Free Herd," by A. J. Glover, editor of "Hoard's Dairyman"; "The Function of an Association in the Marketing of Milk," by H. J. Talmage of Springfield, district manager of the New England Milk Producers' Association; "The State Milk Control Program for 1937," by J. C. Cort, secretary of the Mass. State Milk Control Board; "Trucking Problems of Nearby Milk Supplies," by T. G. Stitts, economist in charge of the dairy section, Farm Credit Administration, Washington, D. C.; "The Federated Dairy Association of Mass. and its service to the State Milk Industry," by C. E. Shepard of Warren, president of the Federated Dairy Associations of Mass.; "Can We Eradicate Abortion from our Herds?" by E. A. Crossman of Boston, inspector in charge of tuberculosis eradication, U. S. Department of Agriculture; "A Program for Controlling Mastitis" by Osman Babson, Gloucester, veterinarian; and talks by C. T. Conklin, secretary of the Ayrshire Breeders' Association, Brandon, Vermont; H. H. Kildee, dean of agriculture at Iowa State College, and J. G. Watson, editor of the "New England Homestead."

Other programs are scheduled in agricultural conservation, vegetables, beekeeping, dairy, farm crops, forestry, food preservation, homemaking, fruit growing, lawns, and poultry. Special programs will be held for Grange members, Farm Bureau women, nurserymen, milk inspectors, and members of Parent-Teacher Associations.

SUMMER CONFERENCE, 1936

The twenty-fifth annual Summer Conference of the Vocational Agricultural Service and the accompanying meetings of the Association of Massachusetts Teachers of Vocational Agriculture are scheduled for Monday, July 27, 1936, and the following days at Massachusetts State College. After Monday the right of way will be given to the programs of the M. S. C. "Farm and Home" week which continues to July 31.

buds and tips of stems. And as soon as the stems and leaves die in the fall, they should be destroyed. It might even be well to remove the top-soil and replace it with fresh clean soil.

If you are interested in buying peonies for planting this fall, I'd suggest these varieties: Avalanche, Felix Crousse, Festiva Maxime, Baroness Schroeder, M. Jules Elie, Karl Rosenfield, Albert Crousse, Eugene Verdier, M. Martin Cahuzac, and Couronne d'Or.

SPEED IMPORTANT IN STAIN REMOVAL

Speed, and lots of it, is the best stain remover in the world, according to Mrs. Esther Cooley Page, clothing specialist. With the arrival of warm weather and the accompanying picnics, lawn games and other outdoor activities, the danger of stains of various kinds seems to be greater than at other times of the year.

In removing a stain it is important to know what caused it, for methods that are effective against one kind of stain are useless or even harmful if used for another kind. But in any case, get at the stain while it is fresh. Grass stains usually can be removed by thorough laundering with soap and warm water. Or, if the material is not washable, carbon tetrachloride, commonly used as a dry cleaner, can be used.

For many kinds of fruit and berry stains, soap serves only to set the stain and make it all the more difficult to remove. Pouring boiling water on the stain from a height of three feet usually will remove it if action is taken promptly. The hot water dissolves the stain and the force of the water dropping from a height adds to its effectiveness.

The same treatment, hot water poured from a height, is effective in taking out coffee stain. Frequently, after the brown stain of the coffee is removed, a yellow stain remains. This can be removed with a bleaching agent, such as hydrogen peroxide, or Javelle water. Javelle water is made by dissolving a half pound of washing soda in a quart of cold water, and adding one-quarter pound of chloride of lime. The sediment should be filtered out and the clear liquid stored in a tightly corked bottle.

Directions for removing many kinds of stains are contained in a bulletin issued by the Federal Bureau of Home Economics and distributed by the Mass. State College, Bulletin 1474, "Stain Removal." Requests should be directed to the Mailing Room, Massachusetts State College, Amherst.

CAN BLUEBERRIES THIS WAY

The following method of canning blueberries will give a product of superior quality. It results in extraordinary fruit flavor, less liquid in jars than ordinarily, and a neat pack. Four quarts make five pint jars if blanched, or 7 if unblanched.

1. Pick over and wash the fruit.
2. Put 2 qts. in a square of cheesecloth.
3. Gather up corners of cloth, thus forming a bag, and dip into a kettle of boiling water.
4. At the end of 15 to 30 seconds, depending on proportion of water to fruit, remove from hot water. If spots of juice show on cloth the blanching is sufficient. If not, dip again. When spots do appear, plunge immediately into cold water.
5. Pack into clean tested jars as tightly as possible, about ¾ quart fruit per pint jar.
6. Wipe off sealing surface of jar, put on rubber and cover, bring top clamp into the notch on cover.
7. Process in boiling water for 16 min. if pint jars, or 22 min. if quart jars.
8. At end of period remove jars from processor and push down side clamp.
9. Allow to cool and then store.

Are Your Vegetables

Early, sound, tender, uniform, prolific, true to type, free from blemishes, and free from poisonous residues?

Let us remember that:

1. Early, heavy crops are obtained only when all factors related to growth are under control.

2. Each particular location is better suited for the production of certain vegetables than it is for other vegetables.

3. Vegetables are likely to be sound and free from blemishes when insects and diseases have been controlled.

4. Well-nourished vegetables harvested at their edible maturity are tender vegetables.

5. The time of planting, with many vegetables, greatly influences the type of growth and the quality and quantity of salable vegetables.

6. Vegetables grown from type tested seeds are usually true to type when harvested.

7. Customers will pay a premium for fresh, crisp, clean vegetables, uniform as to size, shape and color and free from blemishes and bruises.

8. The consumer is entitled to vegetables free from poisonous spray and dust residues.

9. The quality of most vegetables is directly proportional to the time intervening between harvest and consumption.

10. The temperature and humidity at which vegetables are kept after harvest governs the acceleration of chemical changes within the product, thus determining the consumption quality.

You can profit through your own experience if you check your practices against the above facts. Score your efficiency in vegetable-growing and obtain results useful during the remainder of the season and for future years.

J. F. Gallant,

Plan Your Fair Exhibit

The Essex County Fair offers opportunity for young people in the county (under 21 years) to compete with each other in handicraft, canning, clothing, vegetable, poultry, and scientific exhibits. Young people interested in this should write the Secretary of the Fair, Ralph H. Gaskill, Topsfield, for a Premium list. Excellent ribbons and cash prizes are offered.

I wish to call to the attention of prospective exhibitors that those specimens which are attractive and interesting are most appealing to the public and the judges. Quality counts. The day of overgrown and freak specimens is past. Exhibitors should select specimens uniform in size, shape and color, true to type, and of prime table quality, washed when necessary. Leave only about one inch of tops on plate exhibits of beets, carrots and parsnips.

Garden Chat

Breck's Beats All proved to be an outstanding variety in the beet study conducted at the vegetable garden. This variety was early and possessed a dark red flesh, which most housewives prefer over lighter colored centers. Boston Crosby and Crosby Egyptian were tied for second choice.

About the 15th of July will be the best time to see the carrot study. Probably the outstanding variety study will be about the first week of August when it will be possible to observe some thirty-four different hybrid and top cross varieties of corn.

The home gardener who is trellising his tomatoes for the first time should plan once a week or every ten days to remove the suckers or shoots growing out between main stem and leaves. This will put the plant food into fruit development and aid in ripening of fruit more rapidly. Keep plants dusted or sprayed with Bordeaux to prevent late blight from damaging your crops. This same precaution holds for celery and potatoes.

Weeds are growing fast and beginning to seed. A weed pulled before going to seed will save you many next season. It also robs your plants of food and water. Why not down the weeds and increase the quality of your vegetables?

C. M. Stearns

Erosion Losses

Many farmers are tilling what was originally a subsoil without knowing it. Hilltops and hillsides subject to surface run-off have in many cases lost from six inches to several feet of the surface or "A" layer of soil which is now spread over the valleys below. This was strikingly illustrated when trenches in Essex County were dug for a study of soil and tree behavior.

Some recent work in New York state throws further light on this question. Land that sloped ten feet for each one-hundred feet was cropped to potatoes and cultivated up and down the slope. There was a loss of fourteen per cent of the rain water in run-off and fourteen tons of fine soil to the acre ran away in one year. Idle land grown up to weeds lost almost as much rain water as the potato field. But fields cropped in alternating strips crosswise lost only one per cent of the rain water in surface run-off and forty-three pounds of top soil.

Thus the water loss was reduced fourteen times and the soil loss 650 times by terracing. Land in a good stand of grass and clover lost very little soil or water. Many Essex County orchardists need to consider these facts.

F. C. Smith,
County Agricultural Agent

It is not too late to plant lettuce. In very hot weather it should be planted in a partially shaded area of the garden to defer its going to seed.

Timely Thoughts

ASTER YELLOW: When you notice a narrowing and yellowing of new foliage on asters, pull out and burn the plants. This virus disease is carried from plant to plant by leaf hoppers. To prevent this, aster cloth (a fine cheese cloth) is sometimes spread over the aster plot.

SEEDS: Many perennials are now going to seed. Why not gather the seeds and sow them in a convenient spot?

VEGETABLE INSECTS: Insects are working in the vegetable gardens. Before they do any extensive damage, satisfactory methods of control should be carefully applied. By destroying foliage, stem, or roots, insects decrease the manufacturing efficiency of the plant, lower its vitality, and pave the way for the entrance of disease-producing organisms. Determine whether a spray or dust will be most efficient and keep in mind that Iverris (Rotenone) preparations may be just what you desire for the control of certain insects.

PARALYSIS: When a bird shows the first symptoms of paralysis, get her off the range and if in good flesh, enjoy a chicken dinner.

RED MITES AND LICE: Poultrymen will wisely control red mites and lice to insure continuous production.

ANTS: Pyrethrum preparations, non-poisonous to children, will control ants in the house.

IVY: Children would well be taught to distinguish between poison ivy and Virginia creeper. "Leaves three, let them be."

ESSEX COUNTY FAIR (Continued from page 1)

and competent chairman. Members of the staff of the Essex Agricultural School are prominently identified with most of these committees and are voluntarily rendering every possible assistance to the success of the Fair.

Prominent among the new features this year will be an Industrial Exhibit featuring the products manufactured in Essex County. Chambers of Commerce and leading business men have endorsed this plan and are co-operating enthusiastically to make it a success.

Fair officials promise more attractions on the Midway than ever before and Grand Stand entertainment will include death defying thrills of every description with a different feature program every night including Dancing to the music of a nationally famous band; Wrestling, Amateur Show and a big Colored Revue.

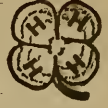
Announcement will soon be made of a Pre-Fair Ticket sale at which tickets of admission may be purchased at less than half-price for a limited time.

It is expected that hundreds of people will take advantage of these low prices and attend the Fair more than once because it will not be possible to see all the worthwhile features of this great Fair in one day.

Aims of Home Economics Extension Service



4 - H CLUB NEWS



Home Economics Extension work was organized in 1914 as a part of a nation-wide educational program provided by the United States Department of Agriculture to give practical information to rural people.

Its specific aims are:

1. To establish a confidence in the homemakers of the state in the scientific help which they can get from the State college in various problems of homemaking.
2. To make it possible for groups of homemakers to discuss their problems, and, through an interchange of knowledge and experiences, to get information on which to base choices and decisions, and to establish standards of living.
3. To encourage and inspire homemakers to think not only on the problems which have to do with the physical functions of the family, but also on problems of a social and economic nature.
4. To help young homemakers to get a sense of values.
5. To assist the homemakers in a given community to become aware of existing situations and resources — both material and human — and, through the development of leadership, to be interested in "doing something about it."

In Massachusetts several projects are available through the Extension Service: clothing, home management, nutrition, child development, parent education, recreation, home furnishing, home accounts and family finance, food preservation, rural engineering, and improvement of home and community grounds. These programs are made available through county home demonstration agents. Individuals in Essex County wishing to enroll in groups or to secure individual assistance on homemaking problems may correspond with Mrs. Mary M. McIntire, Home Demonstration Agent, Hathorne. Fall programs will be announced in the August issue of this paper.

Try Russian Tea

On days that are torrid when you feel little better than parched, run to your ice box for a beverage which (if you were wise) you prepared the day before.

Russian Tea

Over three tablespoons of tea pour two full cups of boiling water. Let it steep. To this add 2½ cups of sugar dissolved in one cup of boiling water. Squeeze and add the juice of four lemons and add the rinds too, letting them stand for fifteen minutes, or longer. Strain through a cloth. Add three quarts of cold water, pour all into quart jars, set in the refrigerator, and—there you have it!

They Shall Have Music

A feature of Farm and Home Week at the Massachusetts State College, July 28 to 31, will be daily group meetings for persons interested in music for the home, club, community, or for children. Mr. Augustus Zanzig of the National Recreation Association will conduct this group. Mr. Zanzig, who specializes in group music activities, has been director of music in the public schools of Brookline, music instructor at Smith College, and for six years lectured on music at Harvard University.

In his four day course at the State College, Mr. Zanzig will discuss easy learning of songs for informal singing, ways of improving group singing, practice in the technique of song-leading, ways of increasing enjoyment in listening to music, rhythmic activities, and planning simple festivals and special programs.

He will also give two lectures on the place of music in the life of the child, and will conduct an hour of group singing each afternoon, leading up to an informal music festival on Thursday evening, July 30.

4-H club leaders who may be attending the Leaders' conference at this time are urged to profit by this course.

Vera Bisbee

Red Roosters Enjoy Outing

The Red Rooster Poultry Club of Saugus spent the weekend of June 20 at the Farley Club House in Amherst.

Eight boys, with Mr. Walter Blossom, their local leader, and Horace J. Shute, County Club Agent, comprised the group.

A diversified program was arranged by Earl Nodine, Assistant State Club Agent, including poultry judging, a caponizing demonstration, a picnic on Mt. Tobey, and a sally around the campus of the State College.

V. B.

Conservation

Essex County sent Mrs. Henry Guild of Amesbury, Miss Dena Bulgarris of Byfield, and Robert Crosby of Andover to the Conservation Camp held in Amherst the last week of June. It is hoped that the knowledge gained by these delegates may be applied to strengthen conservation work in this county.

V. B.

We Know They Can

How gratified a homemaker must be whose shelves are filled with the results of her own canning achievements. Now that fresh fruits and vegetables are in season, don't you feel an urge to rush to your kitchen and start canning?

This is certainly the time of year for preserving to be in full swing. Every real homemaker who loves to see the tempting array of preserves on her store-room shelves, and who knows that she will save much time and money in the future is busily canning now.

Most of us know that the reason we can is to preserve our supply of produce, and because we are unable to get such products during the winter months. By canning fresh products we may give our families the right foods of the very best quality. These canned foods help to build up the body during the winter and to give one the extra heat and energy, essential minerals and vitamins one needs.

There is real satisfaction and joy in canning and it is practical too, for those who do a good job can sell their produce. What homemaker is not tempted to buy a good looking jar of home-made preserves?

Club members, be wise and do some canning this summer. Realize the satisfaction and fun in canning. Join a 4-H canning club and let us help you. If you need any material or have any questions write to the club agents for information.

Vera Bisbee,
Assistant 4-H Club Agent

Local Leaders Convene

The following Essex County leaders are attending the Leaders' Camp at the Massachusetts State College:

Mrs. Mildred Lovell, Mr. Walter Blossom, Mrs. Hazel Rhodes, and Miss Violet Gould, all of Saugus; Mrs. Mary Webb and Mrs. Penson of Danvers; Mrs. Clinton Stevens, Miss Frances Hartman, and Mrs. Richard Abbott, of Andover; Mrs. Leon Jordan, Groveland; Miss Dorothy Alger, Winthrop; Miss Louise Guild, Amesbury; and Miss Georgia Reed, Essex.

The camp is conducted each summer for an interchange of ideas among 4-H club leaders. Informal in its procedure, it is beneficial in its ends.

CARE OF FRUIT BUSHES: It is advisable and advantageous to remove old canes from raspberry and blackberry bushes after the fruiting is completed.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 17

HATHORNE, MASS., AUGUST, 1936

NO. 8

Our Observations

Records kept at this School during the current growing season of strawberries have shown the following production per acre:

Howard 17, 3550 quarts; Catskill, 2900 quarts; Fairfax, 2100 quarts and Dorsett, 1925 quarts.

All varieties ripened about ten days earlier than those of last year. Howard 17 was first picked on June 4 as compared with June 14 in 1935. The other varieties showed earlier fruit this year, the first picking dates being June 6 compared with June 19 last year.

The School's total crop of strawberries has been 2-3 of last year's. Frost reduced the crop. Catskill suffered more than other varieties. Dry weather was later responsible for further reduction in the crop and in the size of the fruit.

Raspberries

The following raspberry varieties were set in the spring of 1933 and show the following production per acre for 1936:

Chief, 2350 pints; Latham, 600 pints; Lloyd George, 4650 pints.

Set in the spring of 1934, Viking yielded 3300 pints; Newman, 400 pints, and Newburg, 1450 pints per acre respectively.

Like the strawberries all varieties of raspberries ripened ten days earlier this year than last. Chief and Lloyd George ripened first, on July 1. Newburg was harvested on July 3 and the other varieties July 6, with the exception of Viking which was harvested July 30.

Latham was badly infested with mosaic and the entire row was rogued after harvest.

Lloyd George was free from mosaic but produced soft fruit which must be marketed and consumed in a few hours after picking. This variety will not hold up over night.

All things considered, Viking appears to be the most promising variety from the standpoint of quality and yield. It produces well in spite of being infested with mosaic, and careful roguing of diseased plants has kept this disease down to a minimum.

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As styles and modes change, the channels of trade are opened to new products which mean new opportuni-



ties. Because of this, the subject of angora wool is interesting. The demand for it is ever-increasing in this country yet nearly all of the supply is imported. In England alone, 80,000 families derive their living from this source.

Angora rabbits are adaptable to farm life and can be maintained largely on home-grown food. Until now local growers of angora wool have found difficulty in disposing of their product but a foundation for an angora wool business in New England has been laid in the recent erection of a factory whose demand for wool is increasing.

The question which rises, is "Will rabbit raising pay?" With a market for angora wool and with the use of such products for feed as second-rate hay and root crops which would otherwise be waste products on a farm, small farmers may now supplement their incomes with a profitable business. One of its advantages lies in its being an all-season enterprise.

Unemployed youths, or retired gentlemen, desiring to so add to their incomes or to provide themselves with occupation may now find a profitable enterprise and congenial employment at a very small investment. It is a light, pleasant occupation for whole or part time employment. Raise angora rabbits and turn your dolour into dollars.

Facts—Not Fancies

The four-lined plant insect, so-named for the light-colored lines marking its dark body, has been attacking leaves of veronica, phlox, and asters this year. While it does not kill plants, it spoils their appearance, leaving the foliage with circular holes cut almost thru. Rotenone sprays and dusts are recommended for control.

Flowers should be cut either before sun-up or after sun-down, and stored in a dark, cool location for four hours, plunged to their heads in water.

Nearly all day-lilies are hardy in New England climate. They thrive in any garden, in any location except dense shade, and they withstand

periods of drought. They have no serious fungus diseases or insect pests. So all in all, there probably isn't any plant more reliable for the garden.

Daylilies have become a very diverse group. In stature they range from one to seven feet, and a succession of flowers from early May until late autumn may be secured.

Carefully placing and spacing the runners from your strawberry plants this year will pay good dividends next year. The runners from the large growing new varieties should be spaced eight to ten inches apart.

Apple Market Reports

Apple reports have been resumed. Mailed second class the cost of the report is fifty cents. If mailed first class in the Boston postal district the cost is one dollar (\$1.00). Outside the Boston district it is one dollar and a half (\$1.50). Send checks or cash to Professor W. R. Cole, Secretary of the Massachusetts Fruit Association, Massachusetts State College, Amherst.

ESSEX COUNTY FAIR

Sept. 16, 17, 18, 19

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION
SUBSCRIPTION 25c PER YEAR

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Calendar

September 8—Opening of agricultural and homemaking departments to new students.

September 9—Opening of homemaking department to old students.

September 16, 17, 18, 19—Essex County Fair at Topsfield.

September 20-26—Camp Vail (4-H Camp) at Springfield.

September 21—Home Nursing class with Mrs. Mary E. Roundy, R. N. at the Hobbs Memorial Community House, Clifton. 1.30 P. M.

New Entering Classes

Soon after this copy of the "Farmer and Homemaker" appears, two new classes will be admitted. From advance information the applicants appear to be well qualified to enter this School.

The writer is of the opinion that too little has been said about the tax paying public who furnish the funds which make these courses possible to the qualified students of Essex County.

It is a matter of deep regret that the Trustees cannot admit all who apply but are forced to maintain a waiting list.

Housing the Layers

Preparation of the house:—It is always desirable to have the house vacated as long as possible by the old birds before the pullets are introduced, especially if there has been any trouble during the preceding season with fall colds, pox, bronchitis, coccidiosis, leukemia, or similar ailments. Adult birds are potential carriers of disease and parasites, and should be regarded as such in preparing for pullets.

After birds are removed from the pen, clean as thoroughly as possible all visible litter, dirt, and caked dust from the house and equipment. Use a hose after this to further the cleaning. Upon drying, scrub the floor with lye and hot water. Lukewarm water is not very effective with lye, hence much emphasis should be placed on the hot water. One can of lye and two pails of water should take care of 100 square feet of surface. When well dried, paint the floor (if wooden), roosts, roost supports, droppings boards, nests, feed hoppers (except inside), water stands and walls adjacent to roosts with creosote, carbolineum or a similar product to protect against mites for the coming year. Approximately a week should be allowed for drying to prevent the birds being burned or blistered by contact with the creosote or carbolineum. The entire pen may be sprayed with a 5% solution of crude carbolic acid to complete preparation for the new pullets.

Litter: Shavings, shavings with straw, sugar-cane litter and peat moss are popularly used. The latter is likely to be dusty in dry weather, but lasts a long time and is most desirable where dampness is a problem. Use only a thin layer when birds are first housed.

Ventilation: If housing in warm weather, give a maximum ventilation to approximate conditions on range as nearly as possible. As cool nights approach it may be desirable to close rear windows at night and open again during the course of the warm days, gradually restricting wide open conditions as winter approaches.

Moving the Pullets: Should be done preferably before production gets beyond fifteen or twenty per cent. Night is a better time for moving, as there is less danger of ruptured egg yolks and the birds may be put directly on the roosts. When placed on the roosts this way, it is generally much less of a problem teaching the birds to roost where you want them to go.

Early Care: Enter pens carefully, either whistling or tapping on the door before entering to avoid frightening the birds. Have low feed hoppers available to insure the birds finding the feed. Move around in the pen carefully especially when handling tools and equipment. Place floor layers gently on the nest, even if you feel discouraged when they promptly hop down again. It will pay dividends to do this. Make sure that every bird

A Genuine Co-operative

Cooperative purchasing, among farmers, is no longer a whispered theory, but a practice carried on not only in Scandinavian countries where it has become notably popular but in the New England and western states of our own country.

Donald Vaughan, a graduate of this School, writes, as manager of the Windsor County Farmers' Exchange in White River Junction, Vermont, that in 1918 a small body of farmers in Windsor County became interested in cooperative buying. An Exchange was organized and has grown to a present membership of 650. In the year 1935 a gross business of \$346 tons valued at \$389,000 was transacted.

The Exchange operates four warehouses and has eleven car-doo distributing points. It handles, primarily, feeds, seeds, fertilizers, eggs, and approximately twenty-five carloads of certified seed potatoes each year.

Working with Mr. Vaughan, is William Chase, assistant manager of the Exchange, likewise a graduate of this School, in the class of 1932.

Do you often wish to know what kind of a spray or dust should be used for a particular insect or disease? Do you know what Black-Leaf 40 (Nicotine Sulphate) is used for-Arsenate of Lead and other arsenicals? Colloidal sulphur? Bordeaux? Pyrethrum? Rotenone? Do you know the comparative advantages and disadvantages of dusting and spraying? Let us know your problems. Our school departments can help you.

Safeguard your financial interest in that renovated strawberry bed by destroying the weeds which are competing with the plants for light, food, and water.

J. F. Gallant

is on the roost at night during the first week, because it is then that the roosting habit is established. If birds have been on green range, supply green feed daily as long as available. If cannibalism develops, remove the picked birds at once, and do also what is more important, watch the flock till you find the bird or birds that pick the others. Regardless of how good these individuals look, have them for Sunday dinner. If cannibalism gets serious it may be profitable to equip the birds with "Pikguards" to prevent further slaughter.

Prevention of Dampness: Before housing the pullets is a good time to make minor or major changes in construction, ventilation or insulation where damp litter has been a problem in the past. Space does not permit treating this subject here, but if you have such a problem the poultry department at the school will be glad to try to help you.

J. Stanley Bennett

SUPPLEMENT ESSEX FARMER AND HOMEMAKER

AUGUST, 1936

IT MIGHT HAVE BEEN PREVENTED

The loss of three hundred head of cattle in a dairy herd, and several hundred pullets on the poultry range was a major catastrophe for one farmer, but it could have been prevented!

Note the following causes of rural fires, and heed the few suggestions for their prevention:

Causes

Lightning
Incendiary
Sparks on Roof
Defective Wiring
Defective Heaters
Defective Oil Stoves
Match Carelessness
Smoker Carelessness
Bonfires and Rubbish
Gasoline and Kerosene
Electrical Appliances
Spontaneous Combustion

Preventive Measures

1. Use of non-combustible or slow burning roofing materials.
2. Use of non-combustible materials and careful construction of flues when constructing new buildings.
3. Properly installed lightning rods on all major farm buildings.
4. Thoroughly cured hay before storage in barn.
5. Purchase of only approved electrical appliances and connections.
6. Discard of or repair of all defective wiring, stoves, and heating systems.
7. Co-operation with the local fire department in cleaning up fire hazards.
8. Provision of special quarters for combustible and inflammatory materials.
9. Location of first aid extinguishers in strategic places.
10. Recognition of fire hazards in the operation of farm motors.
11. Use of a good watchdog on the premises.

PROJECT NOTES

Alden and Paul Parker of Topsfield are adding a third floor to their present poultry building. This will take care of one hundred and fifty more birds.

Student Francouer is located at the Tollgate farm on the Newburyport turnpike.

James Kukene has a project on his father's farm in Amesbury. Farm produce is successfully marketed at the roadside.

Vincent O'Donnell has made some specific observations in working with begonias. He writes in one of his weekly reports: "To be sure most of us know the danger of too little shade on a begonia house but few realize that a heavy shade encourages weak growth." He has recently applied "shade" to a begonia house, consisting of lime water with a slight amount of clay water for color.

JAMES SALTER RETIRES

Graduates of the first four classes of this School will recall Mr. James Salter whose recent resignation from the Norfolk County Agricultural School has terminated fourteen years of instructorship in that school. Previous to his service at Norfolk, Mr. Salter was instructor of vegetable gardening at Essex Aggie for a period of three years.

At the annual banquet of the Agricultural teachers of the State held at Sunderland on July 28, Mr. Salter was presented with a table lamp as a token of the esteem in which he is held by his fellow workers.

1936 SEWING MACHINE CONTEST

Eligibility

Any 4-H clothing club member or junior clothing club leader, 14-21 years inclusive, who has previously been a 4-H clothing club member may compete. No girl who has attended college more than one semester is eligible.

County Contest

Questions on oiling, changing tensions, lengthening stitches, and overcoming difficulties in stitching will be asked by the judge. Competitors will be asked also to make samples showing how to bind a placket and scallops, how to turn a corner, and make an inside and outside curve. The county contest will be held in Salem at the Singer Sewing Machine Company, the first week in September.

State Contest

The state contest will be carried on at the Brockton Fair the week of September 13. Each contestant will exhibit cotton sleeping pajamas made by machine. These will be judged for color scheme, design, suitability of pattern and materials, originality and interest, technique, and cost.

Each contestant will cut and construct a simple garment, pattern and cloth to be furnished, demonstrating her ability to use a pattern, thread a machine, wind a bobbin, stitch, and use the binder attachment. Each girl may take her own sewing equipment which should be complete and used correctly.

Questions on oiling, changing tension, lengthening stitch, overcoming difficulties in stitching, will be asked by the judge.

Grand Prize

To that girl receiving the highest score in the state contest a new sewing machine, modern and stream-lined, will be awarded!

F. F. A. PROJECT TOUR

The project tour committee of the Future Farmers of America selected three worthwhile projects to be visited this year, the first being the Paisley farm in W. Buxford, owned by Mr. William Paisley, a graduate of the unit poultry course in 1932. He works a combination poultry, fruit and truck crop farm. His remodelled barn, 34 x 30, housing 700 layers, has many desirable features. Mr. Paisley buys day-old Rhode Island Red chicks and has a hot water brooding system in the remodelled barn cellar. Besides poultry, Mr. Paisley raises asparagus, strawberries (Catskill and Howard 17), raspberries (Latham) and truck crops for sale at the roadside stand, with Mrs. Paisley in charge. Student George Burkhardt, '39, is employed on this farm.

The second visit was made to Spring Hill Farm, Haverhill, owned by Mr. C. K. Rogers and his son, Harold (Essex Aggie 1928), who received the award of merit from the State Department of Agriculture in January 1936 for being one of the best young farmers in the State. This farm is a combination dairy and truck farm although large and small fruits are also raised. The principal markets are Haverhill and the Boston Produce Market in Cambridge. Some of the products however are disposed of at a roadside stand. In a period of eight years the farm has been extended to include about 100 acres owned or rented. New farm buildings have been built and the old ones repaired or remodelled. In March, 1936, five acres of excellent farm land including one and one-half acres of new asparagus roots were washed away by the flood causing a loss of approximately \$1200.

Interesting was the third project visited, the Gray and Cole nursery in Ward Hill, where a total of five acres is devoted to the growing of the best varieties and the best specimens of these varieties of evergreens and flowering shrubs, peonies, iris, phlox, and rock garden plants. Student Pettengill is employed by these nurserymen. His main work consists of propagating, dividing stock, making up beds, and planting and caring for them.

A gauge to measure ripeness of peaches recently was perfected by scientists at the New Jersey Agricultural Experiment Station. By measuring the pressure necessary to penetrate the fruit with a plunger, the gauge shows when peaches are ripe enough to pick and eliminates much guess work.

Persons desiring information on the control of garden pests can secure a copy of extension leaflet No. 116, Vegetable Dusting and Spraying, by writing to the Extension Service, Massachusetts State College, Amherst, Massachusetts.

SOIL CONSERVATION

The soil conservation program, endorsed by Landon in his Acceptance Speech, and heartily acknowledged by other authorities commends it to your attention.

Two new provisions of the Program have recently been announced by Sumner Parker, executive officer of the State Conservation committee. The first has been designed to allow farmers who met the emergency this year by planting more soil-depleting crops, to take part in more of the practices of the conservation program. The second applies to farmers who planted small grains as nurse crops and because of bad weather were prevented from seeding grasses and legumes. In such cases acreage will be considered as soil conserving and payments will be received if the specified grasses and legumes are planted after the nurse crop has been harvested as hay or used as pasture.

Farmers are advised to fill out and file "Work Sheets" now, that they may benefit next year and in future years by the conservation program. Mail them to the state office.

July was the third driest month recorded in 100 years at Amherst, Massachusetts State College meteorologists reported. The mark of 1.45 inches of rain exceeds a mark of 0.70 inches in 1929 and 0.96 inches in 1864.

Daylilies are ranked among the oldest of garden plants, it being known that two of them were in cultivation when the first flower gardens were made in Europe. But many of the older types have been so neglected that they are almost unknown to gardeners today.

CANNING QUALIFICATIONS FOR COUNTY FAIR

Canning club members are earnestly at work getting their canning requirements ready to exhibit at the Essex County Fair in Topsfield.

We would like to suggest a few recommendations to those members selecting jars for exhibition purposes:

1. Select only full jars.
2. Select jars which have sufficient liquid to cover the canned product.
3. Select jars with clear liquid.
4. Select jars containing unbroken pieces of canned product.
5. Ascertain a satisfactory general appearance which would include spotless jars properly labelled with the name of the product, exhibitor's name with her club and town and the number of years she has participated in club work. The label should be placed on the smooth side of the jar, close to the bottom. The jar bail should be on the same side as the lettering.
6. Use uniform sizes (all quarts or all pints) if possible, or if combining sizes, keep balance in mind.

V. A. Bisbee

NEWS OF THE SCHOOL AT A GLANCE

August 29

On Saturday, August 29, Instructor James F. Gallant of this school will broadcast, with a group of his students over Station WBZ at 1:00 P. M. Tune in for pertinent summer science notes.

September 8

School bells will ring again on Tuesday, September 8 when both the home-making and agricultural departments will open their doors to new students.

September 9

Old students will return to the home-making school on this day.

Charles Clinch, Jr., retiring president of the Essex Chapter of Future Farmers of America, and newly elected president of the Massachusetts Chapter, expects to attend the annual conference of the Association at Kansas City, Missouri, in October.

FRANCES ATWOOD WILL ATTEND CAMP VAIL

Miss Frances Atwood of Beverly will represent Essex County at Camp Vail from September 20 to 26 at Springfield. Each year a delegate is chosen, for an outstanding achievement previously recognized during the 4-H club year, to represent her county.

Camp Vail's headquarters are stationed on the grounds of the Eastern States Exposition.

Miss Atwood will exhibit a dress which she made and modeled at the State Dress Contest in Amherst.

ALUMNI NOTES

Jack Sturtevant, a graduate of this School, and a more recent graduate of the Massachusetts State College, has been appointed Apprentice Instructor at the Essex County Agricultural School for the coming year. He will begin his duties here in September at the opening of the School year.

Carleton Symmes, '32, is employed at the Hood Plant in Charlestown where he is engaged in a new process of bulk ice cream manufacture.

William Stowell, class of 1925, has been with the J. B. Blood Company of Lynn since his graduation.

Carl D. Phipps, '21, employed at the Chedco Farm in Berlin, Mass., and Parker Ryan, '24, of the United Dairies in Watertown, were visitors at the State College Farm and Home week this summer.

Caesar Rosi, '33, is employed by J. W. Osborne of Middleton.

ESSEX COUNTY FAIR

September 16, 17, 18, 19

NEW CANNING CLUB

The following 4-H club girls have recently joined a canning club organized under the direction of Mrs. Ruth Bissett of Lynn:

Earlene Boot
Dorothy Dolan
Catherine O'Neil
Natalie Smith
Frances James
Eleanor Hodgkins
Barbara Hunt
Ruth Bissett
President of the club is Catherine O'Neil, and Secretary, Frances James. The youngest member is 12 years old and there are none over 17 whose canning accomplishments will add substantially to their families' shelves this summer.

New England has two per cent of the area of the United States; 6.5 per cent of the population of the United States; 8 per cent of retail sales of the United States; and 9 per cent more wealth per capita.

Dry ice should never be placed in a tightly closed vessel of any kind. The gas should be given a chance to escape.

NATIONAL YOUTH

Since the innovation of the National Youth Movement in this country a great deal of work has been accomplished in handicraft, homecraft, gardening and poultry raising. At the present time canning clubs are being organized.

Examples of members' accomplishments will be exhibited at the Essex County Fair at Topsfield in the 4-H building. With 4-H clubs and the National Youth organization co-operating it is hoped that this year the fair will be a bigger and better one.

HIGHWAY PLANTING

"Highway Planting" is the title of a new bulletin just issued by the extension service of Massachusetts State College. Written by Frank A. Waugh and Arnold M. Davis of the Division of Horticulture, the bulletin contains many suggestions for adding to the beauty of New England roadsides by means of ornamental shrubs and trees.

Methods of planting, types of trees and shrubs to use for various effects, how to make use of existing natural plantings, pruning, maintenance, and many other points are considered. Persons or organizations desiring copies of this bulletin may obtain them free of charge by filling out the coupon printed below.

Mailing Room
Massachusetts State College
Amherst, Massachusetts

Please send me a copy of the new bulletin—"Highway Planting"—which the Essex Farmer and Homemaker has arranged to have sent free to its members.

Name
Street or R.F.D.
Post Office

Young Farmers

Unique among this year's projects is the partnership vegetable gardening project of three Beverly students, William Corning, Robert Corneliusen, and Raymond Kennedy, which we are calling for short the C. C. & K. Company. Living not far apart, two on Trask St., and one on Cabot St., these boys have been Bill, Bob and Ray to each other for many years. Each one is supplying his family with a variety of vegetables from a good home garden. Their main operations however started on a two and three-quarter acre piece of land near their homes on which they have planted, on a commercial scale, early cabbage, sweet corn, squash, early and late potatoes, tomatoes, peppers, and late cabbage. Soon after starting this project they were offered, and they accepted the opportunity to harvest the crops on a 50-50 basis of an established strawberry bed and raspberry planting on an estate in Wenham, some miles from home. Besides harvesting and selling the berries they have started a new strawberry bed of about one-sixth of an acre and have planted more sweet corn, squash and beans on land available there.

To help finance their operations they borrowed a considerable sum from the Essex Agricultural Credit Union. This has been repaid out of about \$400 of receipts (up to August). They have had a stiff fight with witchgrass due largely to a poor hired job of plowing the sod in which the 2 3-4 acre piece had been for many years. This has added many hours to their labor account but is now well subdued.

Previous to August 1, they had sold about 70 bushels of early cabbage, 40 bushels of corn, 25 bushels of potatoes, 600 quarts of strawberries, and 800 pints of raspberries, from their combined projects. In disposing of these, they have sold from a roadside stand, from house to house, to local stores and in the Boston Regional Market, thus securing valuable marketing experience. The purchase of a Model A 1-2 ton Ford truck has been a great help in their operations.

A. L. Dacy

Alumni Note

Rose Sacco, of the class of 1932, has been appointed Household Food Instructor at the Lynn governmental school conducted as a WPA project.

She writes, "My work consists of the teaching by actual demonstration of the preparing of well balanced meals, the planning of menus, the serving of food, and the teaching of actual table manners. The above is also supplemented by class instruction in dietetics. The classes consist of approximately fifteen to twenty girls who are trained to run a home efficiently and upon the completion of the free eight week course the school is able to secure positions for practically all of the students."

Do You

Want to add organic matter to your soil? Want a low-cost superior fertilizer?

Composting is the answer. You can turn waste plant materials into artificial manure by utilizing leaves, plant refuse and grass clippings. Follow this procedure:

1. Locate the proposed pile in a secluded corner.
2. Put down a layer of plant waste: coarse material 8 to 10 inches and fine material 4 to 6 inches.
3. Sprinkle with a chemical mixture (2 parts 5-8-7 complete fertilizer and 1 part ground limestone) using one pound of the mixture to each wheelbarrow load of plant waste.
4. Apply over this layer, an inch or more of garden loam.
5. Saturate with water.
6. Follow the same procedure in building additional layers.
7. Build the pile broad if necessary but not over four feet in height.
8. Water when necessary to insure a moist pile.
9. Turn the pile after three months and again six weeks later.

The decomposed material will be ready to use as a lawn dressing or fertilizer around shrubbery and in gardens in from four to ten months, not reckoning the time between November 15 and April 15.

James F. Gallant

Garden Chat

Any idle land in your vegetable garden can be planted at once to a late crop of spinach. Virginia Blight Resistant Savoy is the variety to plant. If you have had all the spinach you care for, plant your idle ground to rye. This cover crop of rye will use up any plant food that otherwise might leach out of your soil and then you can turn or plow under this crop next spring, adding considerable plant food to the soil. This plant food or humus aids in preparing the soil to retain the moisture present and is most beneficial to crop growth. Plant rye at the rate of 1-2 bushel per 1-4 acre of land.

High humidity promotes disease spread. Such plants as tomatoes and celery should be kept well covered with Bordeaux to prevent the rapid spread of blight. By keeping the foliage covered with Bordeaux, the blight spores will not have an opportunity to multiply with the presence of moisture.

Are you building up your compost pile? You have an excellent opportunity to make a compost with all your beets and carrot tops, weeds, soil, manure, occasional layer of agricultural lime, leaves, etc. Keep the pile flat on top and not conical. Turn or fork over several times a year to hasten decay.

C. M. Stearns

Brevities by the County Agent

It is not the price of milk but the number of quarts a cow produces daily; it is not the value of the cow but the length of time she stays in the herd; it is not the price of cows, but the difference between income and outgo that determines success in the dairy business.

Don't

Don't spray when the temperature is above 80° F.

Don't spray during foggy or muggy weather.

Don't use concentrated lime sulphurs in summer when finely-divided, wettable sulphurs are available.

Do

Prevent mastitis infection by spreading two pounds of superphosphate per cow daily on the stable gutters and platforms. Germs causing mastitis (garget) remain alive in sand for sixty days; in soil ten days; in sacking eight days; in water sixty-five days; and living germs have been found in straw and the dust of cow stables up to thirty days after infected cows have been removed.

Dairy Feeding

1 pound of hay and 3 pounds of corn silage to each hundred pounds of liveweight, or 2 pounds of hay where there is no silage. Use a measuring tape to ascertain the cow's weight. Have you yours yet? If not write F. C. Smith, Hathorne, and a tape will be sent you.

How far do you walk in a year to strain the milk on your farm? "For each three and a half feet that the milk house is from the farm there is one mile of travel in caring for each cow in a year."

Which Cows to Sell?

Those who fail to return over \$2.00 in milk when a dollar has been invested in feed.

F. C. Smith

Seasonable Subjects

This is the time to cut brush along fence rows in your pastures. Brush, as you know, provides an excellent breeding ground for many insect pests.

Not only do weeds in pasture lands reduce the yield of grass but they also taint the milk. In addition, some weeds are poisonous to livestock and are a hazard to be feared by any farmer. Mowing the pastures now, when the weeds are in the bloom stage, is urgently recommended.

Make sure your laying house is perfectly sanitary and adequately equipped for the pullets you expect to house this fall.

In moving pullets from the range to the laying house careful handling is a precaution which will prevent later reproductive misfortunes, and will tend to keep the mortality rate at a low point.

Round About the County

September 21

On September 21 at the Hobbs Memorial Community House, Clifton Street, Marblehead, Mrs. Mary E. Roundy, R. N., will conduct a home nursing demonstration. Mrs. George C. Carruth, 14 Rose Ave., Marblehead, is forming the group.

September 24

Mrs. J. H. Lewis, 16 Coolidge Ave., Haverhill, is in charge of the home nursing class which will meet for instruction with Mrs. Roundy on September 24 at the West Parish Church, Broadway, Haverhill.

October

Dates for home nursing classes in Salem will be announced in a later issue. Information may be secured, upon request, of Miss Dorothy Fay, 43 Winthrop St., Salem.

Mrs. Esther Cooley Page, Clothing specialist of the Massachusetts State College, will be in Essex County in the late fall. A course in children's coat-making will be offered by her to those communities desiring it. Please notify Mrs. Mary M. McIntire, Home Demonstration Agent, Haverhill.

Arnold M. Davis, horticulturist, will also be in this County during the fall, with lectures on house plants.

Fall Fashions

Paris has decreed that skirts be shorter this year.

How short? About two and one half inches shorter than last year. For sports, sixteen inches from the ground; suits, fifteen; daytime dresses, fourteen; evening gowns to the ankle. Turn up your hems.

What about waistlines? They too are higher, raised several inches above the normal waistline by means of shirrings and darts in clever manners.

Fabrics to look for

Velveteen has at last come back to be a leader, used by itself or in combination with broadcloth. (A broadcloth skirt and velveteen blouse or the reverse).

Next in the list are tweed and jersey, the latter for dresses, the former for fancy or tailored suits, flared or fitted.

Colors

Colors seen already along Fifth Avenue are brick clay, Tyrol green, and Scotch plaids both in bold and subdued tones.

Mary M. McIntire

Canning Demonstration

Mrs. Ruth Howe, canning specialist, of the Massachusetts State College will be in Essex County, August 25 and 26, working, Tuesday, with the advanced group of canning club members in Beverly, and on Wednesday with a Lynn jelly-making group.

The demonstrations will be open to all.

Why Boys and Girls Stay In 4-H Club Work



Front Row, seated left to right: Richard Clayton, Frances Atwood, Ruth Cann, Algerd Ramaika.

Back Row: Doris Albrecht, Florence Cohen, Audrey Boisvert, Vera Bisbee, assistant 4-H Club leader.

The reason for this assumption is best told by the thrilling experiences had by the pictured group of club members from Essex County as they were snapped on the campus of Massachusetts State College.

These young people, all over 16 years of age and having completed from 4 to 8 years of 4-H club work, received the honor of representing Essex County at the annual 4-H Encampment at the State College.

Future Leaders

Along with a fine camping program and the fun of tribal competition, these young people received special training in leadership. Although many of them are already junior leaders and doing a fine job, this extra training will improve their club work and as they reorganize their clubs this fall many more young people will profit from their experience.

This year's camp was run entirely on a paid basis but these young hustlers found a way to go just the same. Here are some of the reasons why these young people were chosen to represent their projects from this county:

Miss Doris Albrecht of North Andover, Leader and member, had a club this year of 11 members with a perfect attendance throughout the entire year and finished with a Banner Club.

Miss Florence Cohen of Winthrop, is an assistant leader in charge of a home furnishing club.

Miss Audrey Boisvert and Miss Frances Atwood, Junior leaders in Beverly, assisted Miss Marion Parker with some 150 club members.

Miss Ruth Cann of Danvers has been a leader for two years and both years she came through with Banner

Clubs. She has also won prizes in the county dress contest several times.

Mr. Richard Clayton of Saugus, a member of the Red Rooster Poultry Club helped to bring that club through to its fourth Banner Club Year. His club also won the banner for the egg laying contest held this year. He has made the Essex County Poultry Judging Team and has established a good strain of birds.

Algerd Ramaika, one of Haverhill's oldest club members, has done excellent work with the garden project, has won many prizes and plans to lead a poultry and garden club this year.

Come on club folks, here are some marks for you to shoot at. A trip to this camp of all camps is yours if you work for it.

H. J. Shute,
County Club Agent

Poultrymen from all thirteen states in the northeast are expected to attend the meetings which will be held on the campus of the Maine State College. The first get-together will be at Cascade Lodge near Saco, Maine, on Monday night, August 24. On the following morning the group will begin an automobile tour up the coast of Maine, stopping en route to visit two modern poultry plants and also for a shore dinner on the edge of Penobscot Bay. In the evening the group will arrive in Orono. General sessions of the conference open on Wednesday, August 26, and another tour is scheduled for that afternoon. This time the group will visit Mt. Desert Isle, Bar Harbor, and Acadia National Park. The evening is reserved for the annual poultrymen's banquet, and on Thursday the business sessions will be resumed.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 17

LATHORNE, MASS., SEPTEMBER, 1936

NO. 9

Unit Courses

During October, November, and December, evening classes in poultry raising and dairying are conducted for adults, at this School. Dairymen, milk dealers, milkmen, and milk inspectors who are actively engaged in Essex County are eligible to enter the dairy classes. The course embodies a study of milk and cream analysis, inspection, handling, management, and quality improvement.

John E. Eastwood, dairy instructor at this School, will conduct the evening unit course. Classes will meet on Wednesday evenings from 7.30 to 10.30 during the above-mentioned months. A nominal fee to cover laboratory expenses will be charged. Further information may be secured on request through the school.

Poultry

Poultry classes restricted to men who are actively engaged in Essex County poultry practices will be held on Tuesday and Thursday evenings during October, November, and December on the School poultry plant. Lectures and laboratory work will be conducted by J. Stanley Bennett, poultry instructor at this School. The course will cover a study of culling, killing, brooding, feeding, egg candling, marketing, housing, costs and general management.

Home Grounds Improvement

H. Linwood White and C. Shannon Wright, instructors in floriculture and ornamental gardening are continuing their home grounds improvement course open to all residents of Essex County who plan, plant, and care for their home grounds with or without the part time of employed labor. Detailed information may be secured from the instructors or the School, on request.

Competing with six teams at the Fair, the Essex County boys placed third in vegetable-judging. The team was made up of Merle Graffam, Walter Tataronis, and Jacob Ranta. Merle Graffam placed fifth among the individuals judging.

The vegetable exhibit, supervised this year by Ellery Metcalf, reached a new peak in quality and arrangement.

REFLECTIONS Essex County Fair

The awards and honors conferred on students and graduates of this



4-H Exhibit — Essex County Fair

School at the Essex County Fair last week reach three-figure numbers.

The apary exhibit in the vegetable building was the work of Edward Batchelder, class of 1929. The rows and rows of extracted honey created a pleasant sunlit delusion on Friday during the deluge.

Miss Hope Crombie of Beverly, a student in the agricultural department of this School was responsible for that graphic exhibit picturing the wedded state of Aggie students and their work.

The School's Saaneens were radiantly white in the stalls reserved for goats but the Anglo-Nubian kids across the way (which we wish we could picture here), received the greatest acclaim in their department. We understand the A. N.'s posed for their silhouettes.

A silver loving cup was awarded the School livestock-judging team for high score among four competing teams. The winners, coached by Instructors Eastwood and Forman, were David Ellwell, Henry Smolak and Archie Nimmo. Essex Aggie students won also the first four prizes awarded to individuals judging livestock. These were: Archie Nimmo, first; Henry Smolak, second; John Wilcox, third; and Percy Curtis.

Gordon Hall, Gilbert Freeman, and John Marshall placed third among the vocational students judging poultry. Competing with general teams

Facts Not Fancies

Pruning

This is the season for pruning to prepare plants, evergreens and deciduous shrubs for the winter season. (Evergreens may be left until December if the gardener wants to use his cut pieces for Christmas decoration). Privets and honeysuckle are becoming large and overgrown. Checking them tends to harden the wood, thus preventing winter injury. And it will produce a more attractive fall effect.

Lawns

Lawn fanciers should cut their grass, and root up weeds in the lawn area, well after frost. An application of cottonseed meal (5 pounds to 1000 square feet) in the fall, will develop a satisfying spring lawn. (Building up vigorous root systems at this

time of year is one of the best recommendations for establishing a healthy, permanent lawn area).

Weeds

To weed now is to weed less in the Spring.

Bulbs

Bulbs (tulip, narcissus, hyacinth, or any of the smaller spring flowering bulbs) may be planted now, in rows, beds, or preferably in borders to become a part of existing garden arrangements. Plant them three times their own width in depth —and right side up.

Seed Conservation

If flower heads of annuals are allowed to grow and ripen, and the petals permitted to drop off, seeds which may be saved will be formed beneath them. Remove any flower heads in excess of three on plants from which seeds are to be saved, fasten a cloth or bag of waxed paper over the remaining flower heads to catch the seeds as they ripen. When they are definitely ripe the stem may be cut and stored and labeled for future use. (Seeds of zinnias are inclined to revert back to the original type after two years.)

(nine in number) they placed fourth. Student Hall was awarded a medal for individual judging, and represented Massachusetts at the regional contest in Springfield. Student Hall also placed fifth in fruit-judging at Topsfield among nineteen competitors.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION
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Secretary, R. H. Campbell Topsfield

Calendar

October 1—Old students will return to Agricultural Department.
October 6-9—Flower show at the School, sponsored by the floriculture department.
October 9—Fruit and vegetable judging at Waltham Field Station.
October 9—Football: Wentworth Institute (3.00 P. M.) here.
October 12—Columbus Day.
October 15-16—Junior Marketing trip.
October 16—Senior Field Trip.
October 17—Football: Essex Aggie at Melrose 2.30 P. M.

Football Schedule

Coach Couhig announces the following schedule for the 1936 football squad.

October 6—At Peabody (seconds).
October 9—Wentworth Institute 3 P. M. at this School.
October 17—At Melrose, 2.30 P. M.
October 23—At Stockbridge (Amherst) 2.45 P. M.
October 31—At Stoneham 2.30 P. M.
November 7—At Keith Academy (Lowell) 2.00 P. M.
November 13—Worcester Trade School (here) 2.45 P. M.
November 21—Open.
November 26—Open (Thanksgiving).

Consumer-Buying

From the array of terminology used today comes a phrase not new but much-used: the consumer-buyer. It refers to the person who buys goods for consumption in contrast to the person who buys for resale as does the manufacturer or the retailer. A large proportion of these consumer-buyers are persons who make purchases for their families so that the problem of making adequate and proper purchases concerns all individuals, because at some time each makes some necessary purchase for either himself or family. Even the boys and girls often "run errands" or purchase some article of clothing, or food, or make selections from a school luncheon menu.

These consumer-buyers do not have access to any considerable amount of accurate information to help them in their purchases. They are subjected to much high pressure salesmanship and have to learn from the trial-and-error practise. Today there is little relation between the quality and price of many articles so that price is no longer a guide to quality.

What help, then, is available to you and me, the average consumer-buyer? The Federal Government gives aid, especially to the buyer of foods, through its legislation such as the Pure Food and Drugs Act with the Mapes' amendment; through its federal bureaus which include the Bureau of Home Economics, the U. S. Bureau of Agricultural Economics and the U. S. Bureau of Standards.

Labels, if carefully read, give much helpful information. On the other hand sometimes this information is very limited. The government has regulated the labelling of products in order to guard the buyer against misrepresentation. The grading of goods in relation to quality is another aid that the buyer should recognize. While some advertising material is of value to the buyer, much present-day advertising frequently presents limitations as a guide to buying because it stresses only certain features.

Salespersons are valuable only so far as the information and accuracy of their knowledge of an article extends. Many salespersons are shifted from one department to another or from the selling of one good to another and lack sufficient knowledge to be of any real help to the buyer.

Some marks, trade marks, and seals mark goods for approval because of the uniformity of the quality of goods. Such a stamp enables the buyer to identify certain goods as being of a certain quality. Such marks help the consumer-buyer of the home in making fair trial of certain goods and able to ask again for those that he liked by a given trade name.

Keener, more alert consumer-buyers will prevent buying without investigation and overlooking products equally as good but not as well-known. Such buyers will compare weight and

A Valuable Fruit —

Tomato

Nature was good to us when she gave us a long season on tomatoes. The vegetable (or fruit) which our ancestors were afraid of is one of our best foods today. Although not rich in fuel value (calories) and therefore not fattening, tomatoes are an excellent source of minerals and vitamins. Vitamin C which is destroyed in the cooking of some fruits and vegetables resists everything in tomatoes. Canned commercially, or at home, tomatoes still contain a good supply of this valuable element.

There need not be monotony in the serving of tomatoes. Raw or cooked, there are many ways of preparing them. It is so easy to peel our ripe native tomatoes there seems to be no excuse for serving them with the skins on. Scalding is perhaps the most common preliminary step in peeling. Rubbing tomatoes with the back of a knife also simplifies the removal of skins.

Recipes

When stuffing for a salad, peel, scoop out inside, sprinkle salt in the cavity, and chill. As the tomato stands the salt will draw out considerable water which may be poured out before the fruit is stuffed. Pineapple makes an excellent filling, as does a combination of raw or cooked vegetables. Chicken salad is of course a favorite. Tomato and cream cheese is another good combination. Chill, and cut in slices or serve whole.

Tomatoes are commonly served stewed, scalloped, or in soup. Baked stuffed tomatoes whet the appetite and may be filled with small amounts of meat mixed with rice or crumbs. (Do not peel). Thick slices of tomato dipped in egg and crumbs and sautéed in a frying pan are toothsome. (Similarly prepared they may be baked or broiled. A sprinkling of cheese will add variation. Slightly under-ripe fruit should be used for this purpose).

Tomato juice as an appetizer has surely "arrived," and what a "find" it is.

It is my opinion that we should eat all we can of tomatoes and what we can't let's "can". Either cold pack or open kettle methods are satisfactory.

Ruth Emerson,
Instructor in Foods.

For the past 16 years pullorum disease testing has been carried on in Massachusetts for the purpose of eliminating the disease from breeding flocks.

cost of different brands of the same article and then compare the quality in order to insure better future purchases. Such buyers will feel content because they are satisfied they have made "good buys."

V. L. Clarke,
Head, Academic Department

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

SEPTEMBER, 1936

STUDENT EDITORS

Homemaking Department

Barbara Clark, Lynn
Lena Tela, Lawrence
Edna Bowers, Lynn

Senior
Senior
Senior

Agricultural Department

Because the upper classmen in the agricultural department do not return to their class rooms until October, their representation on the editorial board will be postponed until that time.

Mr. C. F. Quinby of the Norfolk County Agricultural School was at this School on September 14 taking moving pictures of September farm activities and campus scenes. We are indebted to Mr. Quinby and the Norfolk School for this courtesy.

STATE DELEGATE TO F. F. A. CONVENTION

Charles Clinch

Student Charles Clinch of this school, president of the Massachusetts Association of Future Farmers of America, will attend as state delegate the annual convention of the Future Farmers to be held at Kansas City, Missouri, October 14 through the 17th. Student Clinch will be accompanied by graduate Joseph Andreas of Beverly who is a former member of the Executive Committee of the local chapter.

Clinch came to this school three years ago from Swampscott and at once became interested and active in F. F. A. matters. He is president of the Essex Chapter as well as of the State Association. His summer project has consisted of successfully managing a roadside stand on the Newburyport turnpike.

G.E.G.

With the promise of good prices for potatoes this fall, growers are being advised to take every precaution to avoid unnecessary waste in harvesting operations. Cuts, bruises, sun-scald, and other injuries should be guarded against carefully so as not to reduce the saleable crop.

APPRENTICE TEACHER

The Homemaking Department welcomes Miss Ellen Brown of Cheshire, Massachusetts, to its faculty for the current school year. She is a graduate of Framingham State Teachers' College and is here as an apprentice teacher. She will be working with the freshman division in foods and clothing, the junior divisions in handcraft, and will assist Mrs. Dunn in the High School Specials' clothing classes.

Barbara Clark

HOMEMAKING LIBRARY

Next door to Miss Moore's office in the homemaking building is the library where a rush takes place every morning as soon as the door is opened.

The library is a small, narrow room attractively arranged with its neat shelves of books and long tables which are always decorated with potted plants from the School greenhouse.

Under the supervision of Miss Clarke three students are employed in the library. Lena Tela is the head librarian and is assisted by Mary Lafond and Hazel Mason. These girls are required to keep a high scholastic standing in order to do this additional work.

The library contains over two thousand books, four hundred of which are handled daily by the student librarians. During the summer, shabby books are sent to a reliable binder and returned in September, newly bound, strong, and ready for use.

The system under which the library is run is similar to that of any public library and is excellent training for those who are employed. Cards are issued to each girl in the School and she is held responsible for all books charged to her.

This plan has many advantages, for the students are able to become acquainted with a large variety of books and authors.

Lena Tela

"The Good School Lunch," a free leaflet issued by the Massachusetts State College extension service, gives many suggestions for putting up appetizing and nourishing school lunches. Sandwiches, fruit, and dishes which can be warmed are given detailed consideration. This leaflet may be obtained from the county extension service offices or by writing to the Mailing Room, Massachusetts State College, Amherst.

HOMEMAKING STUDENT BODY, 1936-1937

There are many new students in the Homemaking Department of the School this year.

These include:

31 Freshmen
10 New Juniors 26 Old Juniors
26 Seniors

42 High School Specials (girls who have graduated from High School and take a one-year course at Essex Aggie.)

To date there are 135 students in the homemaking department, representing nearly every city and town in the county.

Edna Bowers

THE LEWIS FIVE

In the School's exhibit at the Essex County Fair, charts were displayed of our successful graduates.

One of the charts had this to say about the Lewis family of Lowell St., Andover, five members of which (three boys and two girls) have graduated from Essex Aggie.

Roger Lewis
Sunnyside Farm
Andover

"Five members of the Lewis family are graduates of the Essex County Agricultural School. They are shown on this chart with their parents, Mr. and Mrs. Herbert Lewis of Lowell St., Andover. The two daughters, Helen and Dorothy, are graduates of the homemaking department while Roger, Robert and Walter received diplomas from the agricultural department. Robert is now district manager for the Davy Tree Expert Company at Syracuse, N. Y. Walter, a graduate of the Massachusetts State College is teaching in West Springfield, and Roger is in partnership with his father on the home acres. This farm is approximately seventy acres and every bit of it is made to return profits. Roger is shown with his Fordson Tractor preparing a seed bed. An up-to-date roadside stand, with Mrs. Roger Lewis in charge, furnishes the outlet for much of the farm produce. This farm specializes in sweet corn from mid-July to October. Strawberries and potatoes are other special crops."

SCHOOL HEARD OVER RADIO

Participating recently in a radio program over Station WBZ, Instructors James F. Gallant and Ellery E. Metcalf of this school, interviewed students who explained the scientific phases of the vocational work carried on in their summer projects.

D. Woodward Walker of Salem, described graphically the operations and activities of the Science Committee.

Lawrence Shanks, a senior, of Essex, accounted for the value of a scientific study of egg quality in retailing his poultry produce.

Gilbert Freeman of Beverly discussed the relation of recorded observations on crop growth to the practical business of vegetable growing.

In the words of Instructor Gallant: "Science has truly become the hand-maid of agriculture and is doing much to replace some of the unnecessary backaches of the past with sound profits and joy in seeing things done practically and profitably. Guess work is being replaced by facts."

In freezing, water exerts a force of 30,000 pounds to the square inch. This explains the damage confined water can do when it freezes.

NEW STUDENTS

Homemaking Department

This fall's enrollment in the homemaking department reached eighty. Following is a roll call of new students:

Methuen

Margaret Aiken
Lois Archambeault
Anna Bennett
Mildred Burke
Ada Marsland
M. Eleanor Martinage
Ruth Merrill
Edith Moody
Grace Raimsey

Peabody

Eleanor Bettencourt
Doris Dorgan
Dorothy Page
Elizabeth Pyburn
Dorothea Savage
Rita Shea

Salem

Geraldine Gates
Josephine McKennon
Marjorie Pope
Olive St. Pierre
Grace Taylor

Lawrence

Dorothy Crombie
Mildred Dick
Katherine Dineen
Charlotte Finn
Bertha Foley
Helen Lambert
Edith Sharp

Beverly

Olive Caverly
Virginia Crowell
Gladys Giles
Priscilla Hopkins
Mary McMahon
Irene Snell
Natalie Spencer
Edith Stevens
Alice Woodberry

Byfield

Marian Dresser
Helen Pearson
Thelma Rogers

Danvers

Ruth Cann
Barbara Hanson
Ethel Ross
Louise Spofford
Barbara Sturtevant
Evelyn Watson

Lucy Grover, Barbara Kellie, Edith McIntyre, Wyota Purington, Pauline Ramsdell, Ruby Savage, Sara Stallings, Rowley, Louise Blakely, Maxine Hartnett, Ruth Randall, Janet Spalding, Newburyport; Sybil Childs, Emily Flewellyn, Helen Holmes, Ruth Martin, Beatrice Morrison, Edith Skidmore, Lynn; Florence Mawson, Eleanor Noone, Sophie Stefanowich, N. Andover; Ruth James, Ellen McDonnell, Marblehead; Esther Boyle, Irene Carbone, Saugus; Helen Moore, Elsa Robblee, Salisbury; M. Louise Minichiello, Mildred Riddell, Ipswich; Helen O'Hearn, Rockport; Ruth Tronerud, Topsfield; Marjorie Vatcher, Cliftondale; Evelyn Jacques, Newbury; Ellen Kauppinen, Gloucester; Dorothy Bacon, Andover; Bertha Clark, Merrimacport.

BACK YARD GARDENER

Well, folks, the weather man reports that Jack Frost has left his summer home and it behooves us back yard gardeners to be ready for an unexpected visit.

Of course, Jack Frost's visits will vary considerably for different parts of the state. I saw an item in the paper the other day that says that the first frosts up Greenfield way come most any time now, while down Boston or Provincetown way they don't come until the middle of October, or sometimes even later.

Nothing looks worse to me than a frost bitten plant, and if anything I can do will help keep beautiful flowers coming for another two, three, or four weeks longer, I'm certainly glad to do it.

I find the best way is to sew together a number of old burlap bags which have been ripped open. Then I take some of the ordinary painted green sticks which I use to support my plants. Of course I have the sticks a little bit higher than the plants I am going to cover, and I throw the burlap bags over these sticks. Then even when the bags are wet with dew they won't break the plants.

I am using the same idea to protect my few tomato plants because there are plenty of green tomatoes still on the vines.

Some people use paper, but that is so hard to keep in place. Others use cardboard boxes which they get from the grocery store.

And don't forget that you had better be getting busy if you have any house plants which you want to move indoors. Gardenias, oleanders, etc., had better be potted mighty soon, and then gradually adjusted to growing indoors.

And it's a good idea to be making some slips or cuttings of geraniums, begonias, and so on. I get a small box, fill it with clean fine sand, keep it moist, and I never have any trouble getting enough plants for the house.

In case you get caught on a visit with Mr. Frost, I have heard that sprinkling the plants gently early in the morning with cold water before the sun's rays strike them will help prevent the leaves from turning black — that is, provided the leaves are not too badly bitten.

And another word of warning. If you have any hardy chrysanthemums, they'll stand quite a bit of frost but the new buds are rather tender, so it's a mighty good idea to keep them covered at night.

THE SUPPLEMENT

This Supplement page was added to the "Essex Farmer and Homemaker" last October by funds furnished through the Alumni Association. At once the value of the extra sheet was apparent and Director Smith made provision for its appearance each month.

Last Spring the students, through the F. F. A. and Echo Club, voted to subscribe to the "Essex Farmer and Homemaker," thus making it possible to convey school news and student activities directly to parents and friends. Through their subscriptions the students are helping the school paper and are at the same time providing themselves with a medium for publicizing their own activities.

G. E. Gifford

NEW STUDENTS

Agricultural Department

Seventy-three new students have enrolled and been accepted in the agricultural department of this School, with the greatest number from Lynn, followed closely by Methuen and Beverly. These students are:

Lynn

Winston Drake
Warren French
George Georgantist
Francis Hill
Joseph Kearney
Thomas Lee
Barbara Metzger
Francis O'Connor
Edwin Wentworth

Methuen

James Barnes
Arthur Bunting
Ernest Campbell
Albert Lee
Warren Nelson
Ronald Skea
John Wadsworth
Russell Weinhold
William Whiteside

Beverly

Roger Coleman
Alden Crosby
Robert Denie
Paul Donahue
Barbara Jewett
Raymond MacDougall
Clarence Mitchell

Middleton

Norman Allen
Lloyd Ballard
Charles Currier
Richard Goodale

Peabody

Irving Blake
Eugene Cahill
Robert Lee
James Maihos

Danvers

Aubert Giles
Richard Mulally
William Pitreau
Robert Spencer
Thomas Tinsley
John Ylitalo

Saugus

Russell Keyes
Arvid Ljunggren
Willis Lord
R. Wesley Searles

George Allen, Dana Killam, Newton Henrikson, George Pelletier, Lawrence; Levon Amiran, Gerald Hood, Walter Stacey, Haverhill; Irving Luce, Raymond Perkins, Lawrence Poulin, Salisbury; Charles Fowler, Ernest Kray, Richard Pearson, Newburyport; Thomas Fullerton, Albert Greenaway, Marblehead; Francis Rogers, William Senior, Byfield; John Balzarini, Fletcher Wonsom, Rockport; Raymond Jenkins, Leonard Marble, Bradford; Andrew Kelley, Nabant; William Lane, Manchester; Horace Luscomb, Hathorne; Lloyd Briscoe, Groveland; David Foss, Essex; Arthur Gerow, Rowley; Donald Nelson, Salem; Andrew Sattama, Gloucester; Charles Welch, Amesbury.

Sanitation

Sanitation is one of the most effective methods for the control of insects and diseases. Any practice involving sanitation faithfully carried out during the fall months will lessen the degree of early season disease infection and insect infestation next spring.

Injurious diseases of vegetable crops, fruits, annuals, perennials, shrubs, and trees are accustomed to overwintering in plant refuse and then spreading to the new leaves, stalks and branches in the spring and early summer. Insects hibernate during the winter in the soil, in plant refuse and in the grass or weeds alongside the garden.

A rigid program of sanitation embracing the following practices is recommended for all home gardeners:

1. Destroy and burn all disease-infested plants.
2. Destroy cull fruits and vegetables.
3. Burn all plant refuse and weeds harboring insects and diseases.
4. Practice fall plowing.
5. Prune and burn disease-infested wood.
6. Disinfect storage rooms, seed flats and bean poles.

For particulars concerning the control of any specific disease or insect, communicate with this School.

James F. Gallant.

Prize Winners In Junior Department

The list of the School's prize winners in the Junior department at the Fair is a gratifying one.

Elmer Luxton was awarded two first prizes, one second, and two thirds for fruits and vegetables.

Among the other winners were Walter Tataronis (one first, second and third); Chester Clinch (a second and one third); Robert Craven (one first and one third); Merle Graffam (one second); John Marshall (one first); Henry Smolak (three seconds); Robert Corneliusen (two firsts); William Corning (one first, a second and a third); Warren Towne (one first); John Kukene (one first and one second); John Zielski (one first); Paul Parker (one first); Lawrence Shanks (one second and one third); David Rennie (one first); Stanley Prophet (one second); Alexander Silver (two third prizes); Betty Hawks (one first prize for a clothing exhibit); Lillian Dion (one third); Lena Tela (one first and one third); and Hope Crombie (one first prize for a special scientific exhibit).

If blankets have become too short by shrinkage or mending, they can be lengthened by sewing at one end a strip of muslin 12 to 18 inches wide. This extra length will tuck in under the mattress at the foot and leave the woolen part on top of the bed.

Early Cabbages Rich In Vitamin C

Chemists at the Geneva Experiment Station have thrown light on several disputed points regarding the value of the important anti-scorbutic vitamin (C). They award high rank to the early or summer varieties as a rich source of this essential food constituent.

Cited results of the specialists' tests show that the varieties of cabbage commonly grown for early harvest in the summer are much higher in Vitamin C than those kinds cut late in the autumn.

It has been calculated also that, on a percentage basis, the so-called summer cabbage was found to be higher in vitamin than orange juice, whereas the autumn cabbage contained a little more than half as much. Whole heads of raw cabbage lost vitamin C slowly during storage, the rate of loss being higher at ordinary room temperature than when the cabbage was stored in a cool cellar or under refrigeration.

Referring to differences of opinion among workers as to the effect of cooking on the loss of vitamin C from cabbage, the Station chemists report that in their studies some of the vitamin C was dissolved in the cooking water where cut cabbage was cooked in an open kettle, while a small amount of the vitamin was destroyed by oxidation. It was calculated that about one-fourth of the vitamin C was lost in the first few minutes of cooking and that later the loss was slight. Even the cooked cabbage was placed in a very cold refrigerator. It slowly lost its vitamin C content and at the end of two days' storage only about one-half of it remained.

County Agent's Briefs

Pasture Improvement—On Orono Silt Loam soil, Mrs. Ellen Kelliher, Teppan Lane, Newburyport, is following plans as outlined by Professor Donaldson and the writer, based on tests made of this soil.

Alfalfa—W. D. Bragdon, Lowell St., Methuen, plans to plow up his alfalfa demonstration seeded in 1928. The final inspection on September 4 with Professor Donaldson, indicated that the best sections were those to which the largest amounts of potash, superphosphate and basic slag had been applied. This checks with the plots at the "Co-op" at Topsfield where 600 pounds of potash showed satisfactory results, while smaller applications were not sufficient.

"FPP"—A new project has been developed by the County Agricultural Agent: the Farm Planning Project. In answer to a request for a soil test for alfalfa, he made a farm visit recently and became convinced that alfalfa should not be grown on that field. After studying the problem, arrangements were made for a

Garden Briefs

In a trial study of some 30 different strains of hybrids and top crosses of corn, the following results were noted at the Essex County Agricultural School Market Garden:

Mar Cross 6, planted May 5 was ready to harvest July 30.

Whip Cross 6-2, planted May 5 was ready to harvest July 30.

Golden Cross Bantam planted May 5 was ready to harvest Aug. 7. In other words, to have a continuous supply of corn for your table or market, plant Early Market or Sensation, which matures a week or ten days earlier than the above varieties, for your first picking, and for succession plantings, Mar Cross 6, Whip Cross 6-2 and Golden Cross Bantam. These varieties can be planted the same day and where they all do not mature in the same length of time, you may have fresh pulled corn all summer.

Some thirty odd varieties of carrots were planted at the Market Garden,—the outstanding variety with great promise is Morse's Bunching. This variety is of the Danvers Half Long type but larger. For early varieties one may plant good strains of Chantenay, Nantes, Morse's Bunching, or Danvers Half Long; while for late, Morse's Bunching or Hutchinson.

Why not help your plant food problem for next year by sowing rye in your garden this fall, (now), at the rate of two bushels per acre. This turned under next spring will aid your plant growth a great deal and help to hold the moisture in the ground so that plants will grow better.

C. M. Stearns

regular farm business check-up. First, a map of the farm, showing acreage of the various fields was made and the different soil types classified, a business statement showing last year's receipts and expenses itemized, a complete inventory of Real and Personal property prepared, a marketing statement showing present methods of marketing recorded, and a labor efficiency chart made. Next, a conference will be held with farm management, agronomy, marketing and other commodity specialists who will assist in making plans for a three-to five-year program. Anyone interested in this thorough-going program should communicate with County Agricultural Agent F. C. Smith at the Essex County Agricultural School, Hathorne, Mass. A limited number of requests can be handled. Net Labor Income is what we all want. This plan aims toward increasing just that.

Fruit Growing—Can anyone grow good fruit any more? Yes. The Brooksby Farm in Peabody and The Long Hill Orchards in W. Newbury, have excellent fruit this year. They sprayed (and dusted) almost continuously.

F. C. Smith

Round About the County

Fall classes in home nursing are forming in the county, under the supervision of Mrs. Mary E. Roundy. New Classes may be undertaken later in the season and will be arranged for through Mrs. Mary M. McIntire, Home Demonstration Agent.

Those communities interested in children's coat-making are asked to notify Mrs. McIntire. A late-fall course is predicted, with Mrs. Esther Cooley Page, clothing specialist, promised for instructor.

Plans are also underway for a course of lectures on house plants to be supervised by Arnold M. Davis, horticulturist of the Massachusetts State College.

Clothing Second In Farm Family Living Expense

Clothing is the second largest item in farm family living expenses according to studies completed recently by economists of the U. S. Department of Agriculture. How much a family spends on clothes depends not only on the money available but also on the ages and occupations of the various members of the family, on the homemaker's skill in remodeling and mending, on changes in fashion, and on clothing standards in the locality.

Records of clothing expenditures of thousands of farm families over a ten-year period show that age is one of the most important factors in the cost of clothing for young people. Members of the family in their late teens and early twenties spend the most for clothes, with girls spending somewhat more than boys. Children from 12 to 14 years are next most expensive to clothe and so on down the scale.

Mrs. Esther Cooley Page, extension clothing specialist at Massachusetts State College, said that the government survey agrees quite generally with the situation in this state. She pointed out that the amount of money spent for various types of garments also reveals typical spending facts. For all ages, headwear and footwear together usually take nearly as much of the clothing money as do outer garments, including women's and girls' dresses, coats and suits, and men's coats and suits.

House plants need a cool soap-and-water bath occasionally to get the dust off the leaves. The best way to bathe a plant is to lay it on its side and sponge off each leaf carefully with absorbent cotton dipped in cool suds of mild soap. Follow by rinsing each leaf with cold water to remove the soap. Do not let the soapy water drain into the soil.



4 - H CLUB NEWS



Music Appreciation

It is hoped that Essex County 4-H members and leaders will enter into the music appreciation program this year with great enthusiasm. It will be divided this year into songs of the seasons. At the general leader training meeting an hour will be set aside for the memorizing of the songs which we list below:

Spring Songs

Source

"Cornish Song" (English)

"The Serenaders" (Italian)

"Tiritomba" (Italian)

Summer

"Morning Comes Early"

"4-H Field Song"

"The Jolly Plough Boy" (English)

Fall

"Allelujah" (German)

"Come to the Fair"

"Gypsy Song"

Winter

"Bring a Torch, Jeanette"

"Dancing" (Slovak Folk Song)

"Good King Wenceslas" (English)

"The Sleigh"

All interested in leading or joining a music appreciation club this winter are requested to communicate with the assistant club agent, Miss Vera Bisbee.

V. B.

Store sweet potatoes in a dry, moderately warm place, such as the basement near the furnace, on a shelf near the kitchen stove, near the chimney on the second floor, or in a warm attic.

Leader Training Meeting October 23

October 23 has been set aside for an all-day leader-training meeting at this School, under the supervision of Miss Marion E. Forbes, Assistant State Club Leader. The morning session will be devoted to the construction of simple articles which might be taught to the younger members. During the afternoon the subject matter will pertain to patterns, materials and the construction of "finishes" and undergarments.

Leaders who attend are requested to bring sewing equipment and scraps of cotton cloth to the meetings.

Barley does not grow well in hot, humid climates. Under arid conditions its culture is successful even in the Tropics, but under humid conditions it grows well only in the cooler regions.

4-H Activities At The Fair

Members of the Essex County 4-H Clubs were in the limelight at the Fair with their exhibits of canned products, handicraft, clothing, vegetables, fruits, pastries, and woodcraft set up in brilliant array in the 4-H building. The work revealed by these exhibits is impressive not only in its abundance but in its quality. It is an example of the benefits which the Smith-Hughes organization offer to eager, youthful citizens.

Miss Doris Albrecht of North Andover was awarded the sweepstakes prize among exhibitors in the girls' department and Yemma Salvatore of Haverhill won a similar award among the boys.

Paul Corson, Richard Clayton and Russell Gould, all of Saugus, captured a silver cup competing in poultry-judging, and Russell ranked first among the individual judges.

A 4-H team judging vegetables came out second and Frederic Usher of Danvers placed third among the individuals.

Frances Atwood Wins Sewing Machine

Miss Frances Atwood of Beverly recently won a new electric Singer sewing machine at the Singer Sewing Contest held at Brockton.

This is the first year that any Essex County contestant has received this award, and we feel very proud of Frances.

Miss Atwood is nineteen years old and has been a club member for eight years and an assistant leader this past year under the supervision of Miss Marion Parker of Beverly.

Previous to the State Contest at Brockton, a county contest was sponsored by the Salem Sewing Machine Company and two girls were chosen from the county to enter the state contest.

Each contestant exhibited specified machine-made articles of clothing. At the contest each girl cut and constructed a simple garment and answered written questions on sewing machine techniques.

Vera Bisbee,
Assistant 4-H Club Agent

Miss Tena Bishop, assistant state club leader, will be in Essex County October 14. Any girls or leaders interested in starting new food clubs may secure Miss Bishop's advice at this time if they will notify Miss Bisbee, Assistant Club Agent.

ESSEX FARMER AND HOME MAKER

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NO. 10

Goat Breeders' Program

On the first Monday of each month, the Essex County Milch Goat Breeders' Association meets at this School to discuss milk, feed, and disease problems.

November 2nd will be devoted to a dissertation on "Plants Poisonous to Goats" by R. L. Fleming, livestock instructor at this School.

E. Byron Bennett of Ipswich, President of the Goat Breeders' Association, announces the following topics for discussion in ensuing meetings:

1. Feeding of special feeds — J. G. Archibald, Experiment Station, Massachusetts State College.
2. Feeding goats on advanced registry test.
3. Production of special milk, i. e. vitamin D milk.
4. Production of clean high quality milk.
5. Care of the doe before and after kidding.
6. Fitting milch goats for exhibition and show purposes.
7. Goats as pets.
8. Udder diseases of goats (mastitis).
9. Digestive diseases of goats.
10. Diseases of the reproductive organs.
11. Control of contagious abortion.
12. Milch goat-keeping on a commercial scale.

These meetings will be open to all who are interested in goat-breeding.

Poultry Hints For October and November

Lights: Early-hatched pullets whose demands for feed are increasing daily because of continued growth, more eggs and larger eggs, are faced with the problem of consuming more and more feed in less and less time, unless artificial methods are used. October first is not too early for lights on very early pullets, and the fifteenth or twentieth is late enough to begin on medium or late-hatched birds.

Culling: It is well to examine any pullets which have reached the age of seven months for non-producers. Any bird which shows by the appearance of her comb or vent that she has not started to lay at that age is not very likely to be a profitable producer, and should be sold for meat.

J. Stanley Bennett,
Instructor in Poultry Practices

Milk Benefits

We often see advertisements urging the consumption of more milk. Our friends in the dairy business, and doctors advise it. Many of the pronouncements in the interest of milk do not specify why we should use more milk. In general they imply that



from a standpoint of health, milk is valuable. It is the purpose of this article to state in more definite terms why one should drink more milk.

Milk is now and has been through the ages the most important food for mankind. It is the most complete food available, building up all parts of the human body and protecting the body from those forces which would weaken it. Briefly, the qualities that made milk an important health food are these:

1. It is easily digested.
 2. It is a well-balanced food, having all food nutrients needed by the human body, and in the right proportions.
 3. It is rich in vitamins which are aids in building up the body and, in addition, protect the body against those forces which cause physical breakdowns.
 4. It is rich in mineral matter which is easily assimilated and made an important part of the human skeleton.
 5. It is palatable, appealing to the appetite of most of the human race.
- In addition to the above health and protective qualities, milk has the advantage of being one of our most economical foods. One quart of it equals, in food value, four-fifths of a pound of beefsteak, one and one-sixteenth pounds of eggs, or four pounds of cabbage.

Facts — Not Fancies

It is through the destruction of chlorophyll, the green pigment in foliage, that the other pigments present in the same foliage are allowed to reign during the climatic changes in the fall. Xanthophyll is a crystalline substance like chlorophyll, but golden yellow in hue, and carotene is the substance so startlingly red.

The name sardine is derived from the island of Sardinia in the Mediterranean where these small fish abound. The pilchard, the bristling or sprat, and the herring are varieties of this clupeoid fish.

Cranberries are as healthful as they are red. Tests reveal that the ash of cranberries, like that of most fruits, is alkaline. They give the body tissues no acid reaction and may be eaten in abundance. One-ninth of an ounce of cranberries a day would keep guinea pigs in perfect health and free from scurvy.

From 1913 to 1920 the farmer received from fifty-two to sixty cents of each dollar the consumer spent for food. In 1935 only forty-two cents of each food dollar found its way back to the farmer.

Thousands of dollars worth of garden fertilizer go up in smoke every fall. The burning of leaves, instead of saving them for compost heaps, is a costly practice.

Dairy herd sires with super germ plasm, animals capable of siring daughters with greater milk producing ability than their dams, are the object of a state-wide search by the animal husbandry department of Massachusetts State College.

In the Island of Lewes, Hallowe'en used to be observed as a harvest festival. Sacrifices were made and the blessings of "Shony", the god of the sea, invoked upon the crops of the next season.

All the vegetables, fruits, and nuts in this country are grown on only 3 per cent of the improved land, yet they supply more than 15 percent of the gross farm income.

GRADUATION NOVEMBER 24

That we should drink more milk is more forcefully brought to our attention when world statistics show that those peoples who use the greatest percent of dairy products per capita are the most rugged and healthful peoples of the world.

J. E. Eastwood,
Instructor in Dairy Practices

Essex Farmer and Homemaker

HATHORNE, MASS.

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Essex County Milk Goat Breeders' Association
Secretary, R. H. Campbell Topsfield

Calendar

- October 31—Football: Essex Aggies versus Stoneham at Stoneham, 2.30 P. M.
October 31—4-H Club Leaders' Meeting at this School.
November 7—Football: Essex Aggies versus Keith Academy at Lowell, 2.00 P. M.
November 13—Football: Essex Aggies versus Worcester Trade School here, 2.45 P. M.
November 21—Football: Open date.
November 24—Graduation exercises of the class of 1936 (agricultural and homemaking departments) at the Peabody Institute, Danvers, 2.00 P. M.
November 24—Alumni Banquet and Dance in the Homemaking building and Agricultural Hall. (Special class reunions: '16, '21, '26, and '31).

NÜPTIALS

Miss Mildred Roberts ('34) to Mr. Stanley Beers, both of Danvers, on Thursday, October 8, 1936.

Miss Margaret Page to Mr. Norman Wood ('36), on Saturday, September 26, 1936. Present address: "Hillocks Poultry Farm", North Weare, N. H.

BIRTH

A son—in October—to Mr. and Mrs. Lowell K. Newbegin (Ruby Estey '22) of Oak St., Danvers. This is the third son and fifth child in the Newbegin family.

Future Homemakers

Home projects, an integral part of the Homemaking School's curriculum, are carried on by students both during the school year and throughout the summer. Last month, reports of the completion of summer home projects were analyzed and compared with the records of previous years. The variety of projects was not only larger this year but involved more responsibility. Students exhibited rare ability in their care of younger children, infants in many cases. Others directed their talents toward dietetic and home management accomplishments. Theirs was the responsibility of planning menus, and in some instances marketing, preparing, and serving meals.

Home decoration was undertaken by some, and not a small percentage of the girls augmented their summer wardrobes.

Home projects during the summer are often supplanted by so-called "employed" projects, a self-explanatory term. So satisfactory were the results of those girls who were employed in homes, institutions, and tea rooms this summer, constant requests for girls have come to the School since fall. It is with regret that the Educational Manager has been unable to fill all vacancies.

What is significant in the summary of project reports is that the girls, undergraduates as well as upperclassmen, were able to make successful application of what, during the school year, had been largely theoretical.

Alumni Notes

Carl P. Swanson, a graduate of this School with the class of 1932, has been elected to Phi Kappa Phi, a national honorary scholastic society, at Massachusetts State College, Amherst.

D. Woodward Walker, class of 1936, is employed as assistant herdsman at the Groton House Farm in Ipswich.

Stanley Bickford, class of 1936, has recently become affiliated with the Chedco Farm, Berlin, Mass.

Edward Bessom, class of 1933, is doing interesting work, of a poultry nature, at the Wirthmore Experiment Station in Lynnfield.

James Gardella of Haverhill, class of 1935, is connected with the Dietrich and Gambil Feed Company of New Jersey. As field man, Gardella's work carries him through Massachusetts and New Hampshire.

When the upholstery of a chair or davenport is in good condition but out of harmony in color and design with other things in the room, a slip cover may be used to produce more attractive combinations, according to home furnishing specialists at Massachusetts State College.

Beauty The Scientific Way

Unless one has been afflicted with a skin disease, her chief interest in skin is in learning what she can do to increase its beauty. It is a commendable interest; that of improving one's appearance. It may justly be encouraged, but there are a great many true facts which women should learn if they would give the proper care to their skin. This is a statement of scientific fact and bears heeding.

In the first place one should remember that the skin is not a mere covering of the body. It is an organ of the body and should be given the consideration of other functioning organs. The skin is a secreting organ, in which dwell millions of small glands of two types: oil glands and sweat glands. These pour out their secretions onto the surface skin of the body during the whole twenty-four hours of the day, and in turn evaporate or are absorbed by the clothing. Remember then, the skin is vitally connected with one's whole system and is not a thing apart.

One's general health is reflected in the skin: many cases of diabetes are first discovered by the dermatologist; focal infections of various kinds, and gland disturbances are unearthed in our search for the causes of skin eruptions.

The care one takes of one's body is of great importance to the skin. The value in bathing would be thoroughly understood if we knew the amount of secretion which is poured out onto the skin. A daily bath is essential if the pores are to be kept free and clear. And why not wash the face (exposed as it is to dust and dirt) with soap and water? Creams have their place but not as a substitute for the cleansing qualities of soap, except in rare cases of highly sensitive skins.

A word about nourishing the skin: the average woman is inclined to be led by the wiles of cosmetics' saleswomen. The skin can not be fed locally. There is no such thing as an external skin food. The skin can be creamed and softened but has no power of assimilating or digesting so-called skin foods applied locally. Its only nourishment is what is conveyed from the stomach through the blood.

Mary E. Roundy, R. N.

Lawns

Lawns should still be mowed, sending them into the winter in a well-clipped and carefully-maintained condition.

Fall leaves should be raked and composted. Leaves, if allowed to remain on the lawn over winter are likely to smother and destroy the effectiveness of the lawn next season.

For lawn bulletins write to your Extension Service, Essex County Agricultural School, Hathorne, Mass.
F. C. Smith

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

OCTOBER, 1936

STUDENT EDITORS

Homemaking Department

Louise Spofford, Danvers
Ellen Kauppinen, Gloucester
Elizabeth Colby, Newbury
Phyllis Steele, Middleton

High School Special
High School Special
Senior
Senior

Agricultural Department

Leonard Duratti, Swampscott
James Keane, Nahant
Norbert White, Lynn
Paul St. Linger, Beverly

Junior
Senior
Senior
Senior

FOOTBALL

PEABODY—ESSEX AGGIES

Essex Aggie suffered a minor defeat at the hands of Peabody High Seconds in Peabody, October 6. The Tannery boys held the upper hand during the greater part of the game with the Aggies coming from under a few times in plays which proved their ability and which forecast a brilliant season for the team. Although the final outcome of the game was a 6-2 victory for Peabody our boys deserve much credit considering the short time the team has been organized.

WENTWORTH—ESSEX AGGIES

In a hard-fought battle between Wentworth Institute and Essex Aggies the home team lost its second game by a 13-0 score. Although greatly outweighed in both the backfield and the line, our team plunged through several times to gain great yardage. On other occasions the Mechanics were practically on the zero line where they were nailed by the strong Aggie defense. Twice the Farmers were in five feet of a touchdown, but were pinned by an equally strong Wentworth line.

LD

ORAL ENGLISH

The Senior girls are enjoying a comparatively new course this year in learning how to speak before an audience.

Deep breathing is one of the most essential parts of this course because if you are sure of your breath you will be more sure of yourself.

Posture is also important, because the audience likes to see you stand well and it gives you more poise. It has been found that one great difficulty is speaking too fast and indistinctly. Therefore there has been much practice in enunciation.

As part of the practice, Miss Moore is arranging her assemblies so that some of the girls can participate. In this way the girls will become more used to speaking before an audience.

The last of the course will include story-telling for children.

EC

F. F. A. ACTIVITIES

The first meeting of the Future Farmers of America association was held Friday, October 9, to act on a motion recommended by the executive committee to present twenty-five dollars to Charles Clinch to help defray his expenses as a delegate from Massachusetts to the National Convention of the F.F.A. at Kansas City.

The Executive Committee has met twice this year to start the ball rolling for future activities in the association.

The special period on Wednesday, October 7, was devoted to the nominations of officers for our thirteen working committees of the F. F. A.

Mr. Mostrom, Chester Clinch, and Norbert White spent part of the morning Wednesday, October 7, picking and placing the members on committees after the students made their choices of the committees on which they wished to serve.

The Chapter Service Committee will make out the program for the Chapter to follow this year. It has made a good start on the entertainment end of its work by securing the services of Mr. V. B. Bennett who will put on his Magic Show the latter part of this month. The following month will feature Reverend Arthur Johnson of Ipswich who will deliver an address no one in our school should miss.

The election of Vice-President and Reporter will take place in the next general meeting. These two offices have been left vacant by Joseph Lydon and William Hayes, two students who left school recently.

NW

MR. SMALL, ASSEMBLY SPEAKER

Mr. Robert O. Small of Beverly, Director of Vocational Education in this state recently spoke to the girls in the homemaking department.

He expressed his pleasure derived from the work being done here, and reminded the girls that they would get out of life just as much and no more than they put into it.

"Give to the world the best you have and the best will come back to you."

Betty Colby

"GREEN AND WHITE" EDITORIAL BOARD

Editor-in-chief: Phyllis Marks, Lynn
Business Manager: Ruth Cann, Danvers
Art Editor: Eleanor Sears, Methuen
Sports Editor: Sybil Childs, Lynn
Exchange Editor: Louise Blakely, Newburyport

Echo Club: Winifred McKay, Byfield
Joke Editor: Eleanor Senior, Byfield
Alumni Editor: Marjorie Colby, Saugus

YOUR RELATIONSHIP TO "THE SUPPLEMENT"

With the re-opening of class sessions in the agricultural department, the various school activities will now be in full swing. This year we hope will be the best ever.

Last year this "Supplement" was started for the purpose of establishing a closer relationship between the parents of students and the School. Student activities are now brought closer to the home, where interested parents may read about and see what their children are doing in the various phases of agriculture.

The "Supplement" is very young, and can only become a success through the whole-hearted cooperation from the students of both departments. By this we mean we would like to have each and every student who has material to be printed to bring his articles to any of the student editors for publication.

Also at this time we urge all students to support the paper. Subscribe tomorrow if you haven't already.

Let's go! Remember, this is your paper, and only you can put it over.

James Keane

AWARDS OF THE LETTER "E"

During the school year many students strive to win a letter "E" for receiving seven or more credits when engaged in extra-curricula activities.

This means a high scholarship standing, and the will to sacrifice time for activities outside the everyday academic schedule.

During the past year the following students in the agricultural department were eligible to receive the award:

*Edward Bessom, Stanley Biebford, James Cashman, *Charles Clinch, Albert Collins, William Corning, Richard Colby, Norman Everett, *Gilbert Freeman, *Francis Gillen, Merle Graffam, Gordon Hall, *Walter Hichens, James Keane, *John Marshall, Lewis Norwood, Gildo Santin, *Lawrence Shanks, *Ernest Tarbox, Walter Tataronis, Warren Towne, *Woodward Walker, *Kenneth White, *Lorin Clark, Donald Gasper and Palmer Jones.

*A star is awarded to those who have previously earned a letter.

JK

**CHARLES S. TAPLEY, SPEAKER AT
FIRST JOINT ASSEMBLY**

The first joint assembly of the year was held October 5th in the auditorium of the Agricultural building.

In the absence of Director Smith, Educational Manager Mostrom extended words of welcome.

The program opened with the salute to the flag and the singing of "America." Mr. Mostrom then introduced Mr. Chas. Tapley of Danvers who gave an interesting historical review of Paul Revere's activities during his colorful life. Paul was the third son of Appolus Revoir who for convenience changed his name to Paul Revere. The family was well-to-do and it was expected that Paul, like his brothers, would go to a higher institution for learning. However after the death of his father he decided to continue Mr. Revere's business. He attained world-wide recognition as a silver and gold-smith. Some of his works are now in the Boston Museum of Fine Arts and the Metropolitan Art Museum in New York City. Successful in every venture, due doubtlessly to his fine workmanship and personality, he was a patriot held in high esteem by his fellowmen. He was captured on that memorable night in April but only after spreading his news throughout the countryside. He was a true American and we, as citizens, should have some of his fidelity and love of country if we would make our country what we would like it to be.

Paul St. Linger

FLOWER ARRANGEMENT

Instructor Linwood White of the floriculture department recently explained the art of arranging flowers, to the girls at an assembly. Many types of arrangement were exhibited and a study of vases was made. Some of the flowers used in the colorful arrangements were marigolds, Chinese asters, zinnias, and nasturtiums. The value and appreciation of this lecture was shown by the excellent entries in the flower show held at the school the week of October 7.

LS and EK

CLASS OUTING

On October 13 the senior class, comprising 66 girls and 40 boys, enjoyed their first fall outing, accompanied by Mr. Knowlton, Mr. Bennett, Miss Harris, and Miss McJunkin.

Teams were drawn for a scavenger hunt which was an immense success. A weenie roast was held near the Essex County Tuberculosis Sanatorium and cider and doughnuts were served.

After a business meeting, dancing was held in the girls assembly hall which proved an excellent dance floor. The music was enjoyed by all and the first outing proved to be both entertaining and interesting.

JK

FLOWER SHOW

The first annual flower show held under the auspices of the Essex Floriculture club in the school gymnasium October 7, 8, and 9 was visited by scores of flower enthusiasts from all parts of the county. The high standard of all the exhibits was most gratifying to the instructors and the committees who arranged for the show.

One corner of the hall was devoted to the exhibit made by William Long and Francis Gillen. A miniature saw mill with a slowly turning water wheel had for its background an interesting arrangement of ornamental shrubs and woodland flowers in this display.

In another corner Gildo Santin had constructed a rock garden which merited a blue ribbon. Along the wall, between these two exhibits, was another blue ribbon winner, a dahlia display by George Merrill.

The arrangement of shrubs by Joseph Blunda and Donald Gasper received favorable comments from the visitors. This exhibit was located in the center of the floor.

Joseph Blunda was high scorer with 75 out of a possible 100 points for the entire show. Andrew Bye placed second with a score of 59 points. Ernest Tarbox scored 30 points to capture the third award.

Bye's 55 points gained the sweepstake award for him in the cut flower classes. Rhea Gosselin took second place with 22 points. Tarbox was third.

In the flower arrangement class the sweepstakes awards went to the following students: Hope Crombie, Ellen McDonnell, Ruth James and Albert Greenaway.

The judges were Mrs. Elsie Cutler of Gloucester; Archie Adamson, Danvers; Harold M. Stevens, Salem; and Thomas Curran, Danvers.

LD

OCTOBER

October is with us once more
The happiest month of the year.
We hear the shouts and the cheering
For the football season is here.

October's the month we all love—
The trees with their gay colors
showing,

The sky that is clear and bright blue
And a brisk west wind a-blowing.

And so with the beauty of nature,
And the football season in swing,
The month of October can bring us
More joys than the winter or spring.

Ellen Wills

WEENIE ROAST

The Echo Club girls recently held a weenie roast in the school kitchen because of the unfavorable weather for an outdoor affair.

Games and refreshments were enjoyed by the many girls who participated.

The affair was in charge of the athletic committee of which Barbara Sturtevant is chairman.

PS

ECHO CLUB ELECTIONS

Executive Board:

President, Helen Lucas, Peabody; Vice-Pres., Ruth James, Marblehead; Secretary, Kay Johnson, Salem; Treasurers: Mary Lafond, N. Andover; Irene Snell, Beverly; Yolanda Scamperino, Lawrence, and Bertha Clark, Merrimac.

Membership Committee:

Evelyn Watson, Danvers; Beverly Bird, Saugus; Frances Carty, N. Andover; Jacquelyn Jackman, Beverly; Priscilla Hopkins, Beverly; Lemyra Briggs, Methuen; Margaret Spinney, Saugus; Mildred Burke, Methuen.

Program Committee:

Natalie Spencer, Beverly; Barbara Clarke, Lynn; Eleanor Sears, Methuen; Eleanor Martinage, Methuen; Janet Spalding, Newburyport; Lena Tela, Lawrence; Esther Boyle, Saugus; Wyota Purington, Rowley.

Budget Committee:

Ruth Cann, Danvers; Phyllis Marks, Lynn; Betty Walsh, Saugus; Pauline Ramsdell, Rowley; Louise Blakely, Newburyport; Anna Gioco, N. Andover; Olive Caverly, Beverly; Irene Carbone, Saugus.

Athletic Committee:

Barbara Sturtevant, Danvers; Charlotte Moore, Salisbury; Marcelle Berwick, Methuen; Edith McIntyre, Rowley; Sybil Childs, Lynn; Eva DeLoe, N. Andover; Sophie Stefanowich, North Andover; Helen Moore, Salisbury.

LP and EK

FALL JUDGING CONTEST

Many students are looking forward to the annual fall judging contests held at Massachusetts State College in Amherst on October 24th. This includes the judging of livestock, milk, fruit and flowers. A novelty this year is the addition in the floriculture field of a potting contest. The contestants will be scored on time, method and the right technique. There will be eliminations at the school and those who win are expected to keep up the high ideals of judging which have marked our teams in the past. After the contest, all the participants and instructors will see the M. S. C. vs. Worcester Polytech football game. The team will probably be home late Saturday night.

JK

GLEE CLUB

The Glee Club started recently under the able supervision of Mrs. Ethel Bragdon of Danvers. The students are learning several new selections for next month's graduation exercises.

A large gathering of boys showed up for the first rehearsal and much interest is centered about the group. In a few weeks a joint rehearsal (homemaking and agricultural departments combined) will be held and by November a very capable group of singers should be in readiness.

JK

Winter Protection

A protective mulch or covering is good insurance for successful wintering whereas the lack of it may mean the loss of many desirable plants due to winter injury. Strawberries and tender perennials should be mulched, the less hardy shrubs might well be wrapped or covered and evergreens should be protected from drying winds. Such practices will reduce winter injury to a minimum.

Low temperatures alone seldom cause damage if the plants go into the rest period in a strong, mature, vigorous condition. It is the change in temperature that is to be guarded against. Alternate freezing and thawing when the soil is not naturally mulched with a blanket of snow is the cause of heaving of plants from the soil. Heaving breaks off many of the roots and only strong, well-rooted sorts can resist such an occurrence. During February and March the sun may encourage plant growth in unprotected areas and a quick drop in the temperature will result in severe injury. Evergreens exposed to drying winds are very often severely injured.

Straw, peat moss, leaves, evergreen branches, corn stalks, or similar materials are excellent for mulching. Such mulches, except peat moss, should not be applied until after the ground is well frozen, usually in late November or early December. With the exception of peat moss all mulches should be removed in the spring after freezing weather is past and before the plants start to grow.

Burlap, heavy paper or some similar material either alone or as a covering over excelsior or straw will give excellent protection. Wrap or cover tender shrubs and rose bushes after the first good freeze. Remove when mulches are taken off.

J. F. Gallant

Junior Market Trip

The annual trip of the Junior class taken in conjunction with the marketing course commenced at 3.30 P. M. on Thursday, October 15, when two busses left the school. Accompanied by Instructor G. A. Meigs the group arrived in West Cambridge where it visited the Boston Regional Market and the First National Stores' Market before 10.00 P. M., at which time the boys adjourned to the Boston Grain Exchange on Milk St., Boston, for the night.

Reveille blew at 4 A. M. when the boys were conducted through the districts around Faneuil Hall. Early morning marketing was explained and other interesting visits included the fruit and vegetable exchange, flower exchange, refrigeration plants, and a large egg-receiving house.

Busses left Boston for the return trip at 2.50 P. M. and at 3.30 the boys were back with a practical knowledge of marketing and deep desire for the comforts of arm chairs,

Erratum

The County Agricultural Agent wrote an article stating there were two fruit growers this year with good fruit. One of his good friends, writes, "I read it with amazement. Pity the 'would-be' and 'has-been' Essex County Fruit grower; only two survive."

Of course no one would expect the County Agent to know every successful fruit grower in Essex County. There are yet a good many desirable, successful, commercial orchards. Besides Mr. Abbott, there are Messrs. Baily, Barnes, Turner, Downing, Livingston, Lewis and others in Andover alone. West Newbury has at least six good orchards.

The County Agent is making a thorough map and survey of fruit-growing in Essex County and shall be pleased to use these in the teaching work at the Essex County Agricultural School as well as at meetings.

F. C. Smith

Student Activities

The Future Farmers of America is the name of a national organization of students enrolled in vocational agricultural schools and departments. In March of 1930 this School set up a local chapter and later affiliated with the national organization. All student activities in the agricultural department are now carried on as a part of the local chapter's program.

The organization is designed to furnish opportunities for leadership and set up high ideals of citizenship and loyalty. One of its objectives is to further cooperative activities among its members. It emphasizes thrift, self-improvement, and service to others.

The chapter at this School has a diversified program which is planned and carried out by the students themselves under instructors' guidance.

Members are assessed forty-five cents per annum, which amount covers the dues to the local, state, and national associations as well as entertainment expenses for the local chapter.

All students of the School are urged to become members that they may take part in the activities of the Essex Chapter.

G. E. Gifford

The United States Department of Agriculture at Washington has issued a set of 10 animal pictures which may be used as wall decorations for a boy's room. Each picture is about 8 by 12 inches, and a mat and frame have been photographed with it. The pictures may be obtained by writing to the department.

for in a short space of time they had ridden some eighty miles and walked an additional twenty-two.

Paul St. Linger, Student

Garden Chat

Storage time is here. Why not continue to enjoy the products from your garden that you have been relishing for some time by preparing your storage conditions to hold these vegetables till you can use them?

There are several factors that you should keep in mind in storing vegetables. They should not be over-ripe, especially in the case of tomatoes and peppers which may be carefully stored for several weeks. Immature specimens should also be kept out of storage, such as small and immature squash and pumpkins. Vegetables to be stored should be free from disease, insect and mechanical injury, if they are to be kept in the best possible way. Celery with much blight on the leaves will not keep well at all if stored. Either wet rot or black rot on cabbage is equally destructive.

The roots—beets, carrots, parsnips, turnips, and potatoes will keep best in a cool moist room or pit. Squash and onions will keep best in a cool dry place, such as an attic room, near the chimney. Beets and carrots should have their tops removed. Do not cut into the flesh of the root.

The essential factors in storage are temperature, humidity, and ventilation. During the early storage days, ventilation is most important, along with low temperature. A considerable amount of heat is created by many of our vegetables when they are first put into storage, which necessitates the importance of the above factors for best conditions.

C. M. Stearns

Shortage of Corn Offset By Other Crops

Because of larger supplies of hay and some feed grains, the drought of 1936 appears to have been a less serious national calamity than that of 1934.

This year's corn crop is expected to be slightly smaller than that of 1934 but the shortage is much more than offset by the larger crops of other feed grains and hay. Corn, held on farms under seal to secure government loans is being used in the emergency. The Agricultural Adjustment Administration reports that only 540,000 bushels of this reserve corn remained available on September 23, at which time farmers were repaying loans on about 50,000 bushels daily. Increased acreage of soil-conserving crops resulted in increases in the tonnage of hay, forage, and roughage available in 1936.

Present indications are that this year's production of feed grains, including all corn, grain sorghums, oats and barley will be about 58 million tons compared with 54 million tons in 1934 and a yearly average of about 100 million tons during the 1928-32 period.

Round About the County

Home nursing classes, sponsored by the county extension service, have been formed in Salem, Clifton, and Haverhill, ably supervised by Mrs. Mary E. Roundy, R. N., and an instructor at this School.

In Clifton at the Hobbs Community House, with Mrs. George Carruth as group leader, a course in home hygiene and advanced nursing is being conducted.

Salem meetings are held at the Salem Hospital Nurses' Home where Mrs. Oliver Pratt has organized a large group.

Home Hygiene is being taught at the West Parish Church, Broadway, in Haverhill, under the leadership of Mrs. John K. Lewis, 18 Coolidge Rd.

A four-meeting project in Slip Covers is being held in Gloucester, conducted by Mrs. M. M. McIntire. Mrs. Harold Wentworth is in charge of registration.

Clothing meetings are now being conducted in Newburyport and Lynn.

Foods classes are to start in Beverly and Marblehead. Mrs. Carl Gardener, 22 Butman St. will lead the Beverly group and Mrs. Philip Harrington, 23 Oak St., the Marblehead classes.

Classes in cane-seating, dressmaking, garment finishes, and knitting are being conducted on Monday and Thursday mornings by Mrs. M. M. McIntire, Home Demonstration Agent, at the Essex County Tuberculosis Sanatorium.

These classes are the outgrowth of work carried out, on a smaller scale, last year.

Town Chairmen

Members of Mrs. McIntire's Advisory Council for the year 1936-37 are:

Mrs. H. K. Richardson, Chairman, Middleton
Mrs. Felix Carr, Peabody
Mrs. Edward Duggan, Marblehead
Mrs. Ernest Hardwig, Ipswich
Mrs. E. Robert Little, Boxford
Mrs. Franklin Robblee, Salisbury
Miss Maidee Polleys, Essex
Miss Marion Parker, Beverly
Mrs. John Henderson, W. Andover
Mrs. Bernard Manning, Amesbury

A course in children's coat-making will be conducted in January by Mrs. Mary M. McIntire. Any women interested in joining the class are asked to communicate with Mrs. McIntire at the School. (Telephone Danvers 50).

Members Dairy Unit Course

On October 14 Instructor J. E. Eastwood opened his evening dairy unit course, with the following Essex County residents present:

John B. Swift, Beverly
M. E. Johnson, Danvers
Alphonse Bosse, Lawrence
George S. L. Waldie, Methuen
Charles D. Whalen, Newburyport
Philip Tarr, Gloucester
Edward Kelley, Lawrence
R. P. Sierpina, Methuen

Farm Program Meetings

Did you think the Soil Conservation Act satisfactory? What changes would you like to suggest for 1937?

The National officials have asked the County Soil Conservation Committee to recommend ideas for changes and improvement in the Soil Conservation Act for 1937. The County Committee desires your advice and suggestions.

Meetings: There will be a meeting held at the Newburyport Y. M. C. A. on October 26 at 7.30 P. M. and a meeting at the Essex County Agricultural School on October 27 at 7.30 P. M. Sumner Parker, State Conservation Executive will be present to explain the Act and will answer questions.

Suggestions: Some suggestions which I have heard are: the base be built on all crop land in the farm; that there be no soil-depleting crops and no payment for reduction of such crops; that the acreage in soil depleting crops be used also in computing the base for the farm; that the use of manure be classed as a soil-building practice.

What do you think?

F. C. Smith, County Agent

Hallowe'en Ideas In New Leaflet

With Hallowe'en ghosts around the corner, the extension service of the Massachusetts State College has issued a new leaflet describing Hallowe'ens of the past and giving instructions for modern parties and Hallowe'en games. Prepared by Lawrence V. Loy, the new recreation specialist, the leaflet offers many suggestions for getting the most out of this holiday that began back in the ages when witches were supposed to walk abroad.

Single copies of the leaflet, entitled "Hallowe'en" may be obtained gratis by writing to the Mailing Room, Massachusetts State College, Amherst.

Turkeys To Strut At Poultry Show

In keeping with the growing importance of turkey raising in north-eastern states, the Second Poultry Industries Exposition will feature a large competitive turkey show in New York City from November 10 to 14 inclusive.

Massachusetts turkey growers are urged to enter birds in the show as a means of giving consumers the opportunity to note the high quality of turkeys grown in this state. Turkeys entered will compete for the grand championship awards offered by the Northeastern Poultry Producers Council and for substantial cash prizes, gold and silver medals, rosettes, ribbons and stickers.

The show will consist of large exhibits of both live and dressed turkeys from Massachusetts and other states. The dressed turkey exhibit will include two divisions: one for blood-and-feathered-dressed turkeys, and the other for individual retail pack or full-dressed turkeys.

Massachusetts turkey growers who are interested in entering their birds in the turkey show are urged to communicate directly with Glenn T. Shaw at Elbow Brook Farm, Palmer, Mass. achusetts.

Members Poultry Unit Course

On Thursday evening, October 8 the first meeting of the poultry unit class under the instructorship of J. Stanley Bennett was held, with the following roll call of Essex County poultrymen:

James Martin, Salem
Joseph Lajoie, Peabody
N. L. Pearce, Beverly
Edward Thompson, Danvers
Gardner Tipert, Danvers
Daniel Clement, Amesbury
Leon Twine, Amesbury
Edward Grennon, Middleton
Thomas Ivers, Danvers
Frederick Dennen, Gloucester
Richard White, W. Peabody
Elsie Bruce, Ipswich
Chester Clark, Beverly
Theodore Atkinson, Topsfield
George Delp, Ipswich
William Bushby, Danvers
John Tilbury, Amesbury
Warren Heath, Manchester
John McTiernan, Beverly Farms
Elvin Cox, Ipswich
P. L. McComiskey, Gloucester

4-H Notes

West Boxford has eleven members in its 4-H clothing class this year. Regina M. McCarthy is its leader.

Several 4-H members practiced vegetable-judging at the School, Saturday, October 17, in preparation for the Amherst judging contest to be held October 23 and 24.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

NO. 11

VOL. 17

HATHORNE, MASS., NOVEMBER, 1936

Graduation

Trustee Melville G. Grey awarded eighty-seven diplomas and certificates to this year's graduating students at the twenty-first annual graduation exercises held at the Peabody Institute, Danvers on Tuesday, November 24.

Agricultural Department

Following is a list of graduates from the agricultural department:

Elmer Aldrich, Andrew Bye, John Spencer, Beverly; William Auger, Ernest Tarbox, Saugus; Edward Besom, Robert Farmer, Vincent O'Donnell, Lynn; Stanley Bickford, Lynnfield; Richard Camarra, Methuen; Lorin Clark, Merrimac; Charles Clinch, Jr., James Goodale, Warren Page, Middleton; Richard Colby, Charles Pettengill, Haverhill; Albert Collins, Eileen Stewart, Danvers; Richard Estes, Tony Fiore, Swampscott; Arthur Glackin, Jr., James Owens, Arthur Pohju, Peabody; Gordon Hall, Andover; Mildred Hills, Newbury; Hollis Lufkin, Jr., Gloucester; Daniel Merrow, Norman Wood, Amesbury; Lewis Norwood, Jr., Rockport; Alden Parker, Topsfield; Lawrence Shanks, Essex; D. Woodward Walker, Kenneth White, Salem.

Homemaking Department

Following is a list of graduates receiving diplomas in the homemaking department:

Agnes Burke, Florence Hirst, Gertrude Lawton, Methuen; Doris Cooke, Nahant; Olive Drew, Gertrude McAdoo, Phyllis Thompson, Saugus; Edna Goodale, Ethel Webb, Danvers; Anita Granville, Claire Moran, Rita Pasquale, Evelyn Young, Lynn; Josephine Hogan, Swampscott; Evelyn Homan, Wenham; Marjorie Hudson, Freda Peterson, Newbury; Mildred (Continued on page 2, col. 3)

Athletic Field

What—not so long ago—was marshland and scattered groves of saplings, red maples, and giant elms, is rapidly and mystically becoming a glorified athletic field on the site of the School property.

Arthur W. Hall, supervisor of the project, has announced that the last strip of peat, the length of the field and thirty feet in width, is being excavated, and that within three weeks' time the stone and gravel will be laid. The first of the year should see the loam spread and the field taking shape.

Facilities for football, baseball, tennis, and track will be realized by the students in the spring. It is a long-cherished dream coming true.



"To Grandfather's Farm We'll Go"

Twelfth Annual Science Exposition

In the fall of 1925 a handful of students set up a small but significant array of scientific exhibits in Agricultural Hall. Thus Science Day became known at the School.

In 1935 Science Day exhibits had outgrown their habitat. The four walls and center of the gymnasium were lined with tables to accommodate the overflow and Science Day was extended to three days. Parents and friends of the School from throughout the state visited the exhibits and saw the progress in agricultural accomplishments as developed at the School.

This year Science Day came to be known as the Science Exposition. As of yore, exhibits were entered on a competitive basis, classified according to the phase of scientific agricultural practices which they depict. Exhibits were set up and judged on Saturday, November 14. On the following Wednesday a group of students, with their instructors, representing Norfolk County Agricultural School and Worcester North High, were guests at an assembly sponsored in connection with the Exposition, at which a representative of the General Electric research laboratories revealed the most recent (and, to the audience, most astounding) electrical discoveries.

Donald Gasper of the Senior class was awarded the sweepstake medal for his entries in the Exposition. A complete list of prize winners will be found in the Supplement of this issue.

Prize Winners For 1936

It has been a custom of the School to award prizes on the day of graduation to students (graduating members and undergraduates) who have won distinction in scholastic and field achievements.

The prizes have been the generous gifts of Trustee and Mrs. R. S. Bauer, of Abraham Krasker, a former instructor of this School, and of the Alumni Association. This year Mr. and Mrs. Percy Wheaton of Manchester were the donors of a special award, in memory of their son, Roger Wheaton, a member of the class of 1936, who was fatally injured in 1935.

The list of this year's prize-winners follows:

THE R. S. BAUER AWARDS for Excellence in Agricultural

Projects:

- 1st, Gilbert Freeman, Beverly, \$20.00
- 2nd, Leavitt Moulton, Beverly \$20.00
- 3rd, Percy Curtis, Rockport \$10.00
- 4th, Warren Towne, Beverly \$5.00
- 5th, Paul Parker, Topsfield \$5.00

THE MRS. R. S. BAUER AWARDS for Excellence in Homemaking

Projects:

- 1st, Ruth Dixon, Lawrence \$15.00
- 2nd, Rita Pasquale, Lynn \$10.00
- 3rd, Freda Peterson, Newbury \$5.00
- 4th, Anita Granville, Lynn \$5.00
- 5th, Mary Minichello, Ipswich \$5.00
- 6th, Ruth Peterson, Beverly \$5.00
- 7th, Henrietta Stockley, Peabody \$5.00

ALUMNI ASSOCIATION AWARDS for Greatest Improvement in

Academic Work:

- Homemaking: Freda Peterson, Newbury \$5.00
- Agricultural: Richard Estes, Swampscott \$5.00

ABRAHAM KRASKER MEDALS for excellence in English:

- Homemaking: Mildred Humphreys, North Andover
- Agricultural: Vincent O'Donnell, Lynn

SPECIAL AWARD

- of Mr. and Mrs. Wheaton: Lorin Clark, Merrimac

WANTED:

Webster's Spelling Book McGuffey's Reader

We would appreciate very much for our school museum the loan of a copy of Webster's "Spelling Book" and McGuffey's "Reader."

If any of the friends of the school have either of these they would do much to show our students two great milestones in the march of education.

Should you get in touch with Mr. Thurlow, instructor in English and History, we would appreciate it.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

A MONTHLY PUBLICATION
SUBSCRIPTION 25c PER YEAR

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.

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Eastern Massachusetts Society of Beekeepers
Secretary, E. S. Batchelder Cliftondale

Essex County Milk Goat Breeders' Association
Secretary, R. H. Campbell Topsfield

Calendar

November 30—School reopens after Thanksgiving recess.

December 4—Evening vegetable gardening course at this School. 8 P. M.

December 11 — Home Furnishing Leader-training meeting. (auspices of 4-H Club)

December 17—Rabbit Breeders' meeting at this School. 8 P. M.

December 18—Echo Club (Essex County Homemaking Organization) Christmas Party. Members of Echo Club hostesses to Future Farmers of America.

December 18—Christmas holidays begin.

December 29—Five-year banquet for 4-H Club members.

January 4—School reopens after Christmas recess.

New Organization

At a recent meeting the turkey growers of Essex County formed an Essex County Turkey Growers Association. Mr. William D. Powers of Peabody was elected President, and Mrs. Edward Shattuck, Andover, was elected Secretary. The Association also affiliated with the newly-formed Massachusetts Turkey Growers Association.

The main purpose of the Association is to set up a system of orderly marketing.

Homemaking Dept.

Fall Fashions

The daytime silhouette is either straight and narrow or widely flared. Choose the one which is most becoming.

Skirts are shorter this season but let your mirror be your guide.

When you are planning your winter wardrobe think first about your color, then your dress color, and last about your accessories. Then think of all three together. If you are large stick to the darker tones of your favorite colors (and let's hope your favorite colors are your becoming colors.) If you are blonde, wear blues to deepen your eyes, brown to make your hair look light. If you are dark you can wear more brilliant colors.

There is a great deal of magic to color. It will make large people look small, small people look large, blondes more blonde, brunettes darker. Try to learn some color tricks.

Abbie Clapp,

New Uses For Oxygen

Oxygen is our most abundant element. At the same time it is the element for which living organisms have the greatest need.

Within the past few years a number of uses for commercially-prepared oxygen have been developed. Commercial oxygen is attained by liquefying air. Liquid air is essentially a mixture of oxygen and nitrogen. Since the two return to a gaseous state at different temperatures it is possible to separate them.

The oxygen is stored in steel cylinders equipped with safety valves and a pressure gauge. For hospital use the oxygen cylinders carry a pressure of five hundred pounds per square inch. These cylinders of oxygen play an important part in saving lives. In the operating room the use of oxygen makes the administering of anesthetics much safer. The most modern of baby incubators are equipped with oxygen units. Oxygen inhalators are used in artificial respiration, and oxygen tents or specially constructed oxygen chambers are used in the treatment of pneumonia and other respiratory infections.

Submarines, bathyspheres and other under-sea craft must carry oxygen supplies. At high altitudes the rarefied atmosphere makes breathing difficult and oxygen tanks are necessary. In South America passenger trains travelling over the Andes at high altitudes carry oxygen for the benefit of patients with weak hearts.

In Europe at the present time civilian populations are being taught the use of oxygen-equipped gas masks. The same type of mask is used in mines, in burning buildings or wherever poisonous fumes make air unfit for breathing.

In industry, oxygen tanks carry a pressure of twenty-one hundred pounds to the square inch are used for oxy-hydrogen and oxy-acetylene blow torches. Constance Lovett,

Alumni Notes

Mrs. John Petkewich (nee Emma Callan, class of 1932) formerly of Peabody, recently sent us the following new address:

30-38-54th Street,

Woodside, Long Island, N. Y.

Arthur Glackin, class of 1936, is employed at the Groton House Farm in Ipswich.

Announcement was recently made of the marriage of Andrew Bye, class of 1936, and Miss Ruth Steedman of Beverly.

Miss Janet McCrone, class of 1934, is enrolled as a Freshman at the University of New Hampshire and is living at Knox Marsh Rd., Dover, N. H.

Milton Snow, class of 1932, is teaching at Cambridge High School, Jeffersonville, Vermont.

Bernard Collins, class of 1927, is living, with Mrs. Collins, at 27 Mason St., Beverly, and is employed at the Pequot Mills in Salem.

Hyman Weinstein, class of 1933, is employed by the Salem Paper Company. His present address is 41 Bridge St., Salem.

Miss Eunace Freiwald, class of '27, is living in Bogota, New Jersey at 244 Walnut Avenue.

Arthur Gordon, class of 1928, is a frequent visitor at the School.

Albert and Kenneth Numan, class of 1934, are engaged in the florist trade with their father, Mr. Albert Numan, 95 Lincoln Ave., Saugus. The Numans have recently purchased an estate of several acres for the growing of nursery stock.

Horace J. Shute, Alumni Secretary, was gratified with the response at the alumni banquet and dance held November 24th.

GRADUATION

(Continued from page 1)

Humphreys, North Andover; Elizabeth Johnson, Salem; Thelma Jones, Beverly; Kathleen McAuliffe, Lawrence; Leila Moore, Salisbury; Louise Semple, Gloucester; Arlene White, Newburyport.

Homemaking Department

Following is a list of graduates in the homemaking department who received certificates:

Bertha Bowers, Barbara Metzger, Lynn; Pauline Buxton, Ethel Stasiopoulos, Salem; Ruth Cahill, Florence Smith, Gloucester; Florence Chadder, Helen Hayden, Henrietta Stockley, Peabody; Helen Chase, Elizabeth Poland, Newburyport; Laura Chase, Newbury; Emily Currier, Salisbury; Mildred Day, Janet Gillis, Mary Minichello, Ipswich; Ruth Dixon, R. Geraldine Powers, Ruth Riley, Elvira Savinelli, Lawrence; Mildred Hennigar, Beatrice Loveys, Danvers; Marion Hodgins, Sylvia Smith, Rockport; Ethel Lewis, Essex; Rose Mills, Methuen; Ruth Odell, Marblehead; Ruth Peterson, Priscilla Preston, Beverly; Beatrice Emerson, Haverhill.

SUPPLEMENT ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

NOVEMBER, 1936

STUDENT EDITORS

Homemaking Department

Louise Spofford, Danvers
Elizabeth Pyburn, Peabody
Elizabeth Colby, Newbury
Phyllis Steele, Middleton, Senior

Agricultural Department

Leonard Duratti, Swampscott
James Keane, Nahant
Norbert White, Lynn
Paul St. Linger, Beverly, Senior

"PERSONALITY"

Graduation Essay

by Mildred Humphreys

Mildred Humphreys, the student chosen from the Homemaking Department for the graduation essay, is one individual entirely capable of giving an essay on personality. Her own is most radiant and enables her to make friends readily.

Her graduation address was based on two quotations: "As a man thinketh, so is he," and Samuel Coleridge's definition of personality: "individuality existing in itself with nature as a ground." These were illustrated with examples of a person, like Helen Keller, who has overcome obstacles.

Mildred went on to explain that biography is one source of studying the personalities of great men and women who have surmounted difficulties.

She quoted Abraham Lincoln as saying "God must have loved the common people he made so many of them," and added, herself: "We are not royalty but we can make our personalities radiate in the little kingdom of friends in which we live. Good manners should not be put on as ornaments, or hung on a tree, but they should be a part of our lives."

Personality is individuality but no two personalities are alike. One can build on this ability to be original, interesting, and pleasing to his friends and in that way he improves his individuality. If he improves his own traits he can make his personality a possession to be proud of.

"Personality is much more complicated than it appears to be. It is best regarded as the sum of all the physical and mental characteristics of an individual." Some of these characteristics are dormant, but both have roles in the conduct of the individual and later indicate what his makeup will be.

You see the goal and it is your task to reach it. Life may make it difficult for you to reach your goal because it is a mysterious force and no one knows which way it will turn. It is the force of life that determines how long it will take you to reach your goal.

Louise Spofford

SENIOR OFFICERS

James Cashman of Salem has been elected President of the Senior class; Barbara Sturtevant of Danvers, Vice-president; Norbert White of Lynn, Treasurer, and Catherine Hanson of Lynn, Secretary.



© National Dairy Council and New England Dairy and Food Council

(By author)

SUMMER PROJECT AWARDS

Summer food project awards were presented recently by Miss Moore to the freshman and junior girls of last year.

Those girls receiving awards worked on their projects during the summer vacation. In order to qualify for the awards the girls either found outside employment in foods work, or carried on a foods project in their homes.

The following girls were the winners:

Juniors (with outside employment):
1st, Barbara Clark, Lynn; 2nd, Phyllis Steele, Middleton; 3rd, Amelia Tataronis, Salem.

Juniors (with home projects):
1st, Betty Hawkes, Saugus; 2nd, Ruth Graf, Rowley; 3rd, Edna Wilmot, Beverly.

Freshmen (with outside employment):
1st, Katherine McLaughlin, Saugus; 2nd, Olive Purdy, Lawrence; 3rd, Kay Johnson, Salem.

Freshmen (with home projects):
1st, Ellen Wells, Ipswich; 2nd, Marcelle Berwick, North Andover; 3rd, Frances Carty, North Andover.

Elizabeth Pyburn

ECHO CLUB PROGRAM

The Program committee of the Echo Club held its first meeting on October 14. Lena Tela of Lawrence was appointed chairman and Barbara Clark of Lynn, secretary.

The committee immediately made the following tentative outline for the year's program:

October 29: Business meeting
November 18: Illustrated talk on India by Mrs. K. W. Forman
December 18: Christmas Party for the boys
January: Outside speaker
February: Amateur program
March or April: Outside speaker
May: Annual Business meeting

Members of the committee are:

Natalie Spencer, Beverly; Janet Spalding, Newburyport; Eleanor Sears, Methuen; Esther Boyle, Saugus; Eleanor Martinage, Methuen; Wyota Purington, Rowley.

Lena Tela

ECHO CLUB NOTES

Financial Plans

The budget committee of the Echo Club was very active at its first and second meetings. Louise Blakely of Newburyport was appointed chairman and Anna Gioco of North Andover, secretary. Other members of the committee are Ruth Cann, Danvers; Pauline Ramsdell, Rowley; Phyllis Marks, Lynn; Betty Walsh, Saugus; Olive Caverly, Beverly; and Irene Carbone, Salisbury.

The committee definitely planned to sell ice cream on each Monday and candy on Thursdays in the school cafeteria. Another plan for raising money was a repetition of the auction sale which was very successful last year.

Committee members voted that the money raised be allotted to the athletic and program committees, with a small amount reserved for gifts and incidentals.

Anna Gioco

ARMISTICE DAY EXERCISES

On Tuesday, November 10, the annual pre-Armistice Day exercises were held in the Assembly Hall of the Agricultural building. The exercises were opened by Augustus Sheehy who read the proclamation by the Governor, declaring November 11 the holiday.

Russell Weinhold of the freshman class recited the poem "Flanders Field." The entire student body then sang "Columbia the Gem of the Ocean."

Instructor Henry P. Thurlow addressed the gathering, presenting the roll of honor and narrating his experiences at the first Armistice Day, November 11, 1917.

The exercises were closed with the singing of "America."

James Keane

FOOTBALL

On October 23 we went to Amherst to play Stockbridge. It was a hard-fought game as Stockbridge had been undefeated and not scored against. During the first few minutes of the game Stockbridge scored a touchdown. We tied the score with a pass from Santin to MacAloney, and won the game by intercepting a Stockbridge aerial and running fifty-five yards to the four yard line where the ball was rushed over by Santin. Final score was 12-6.

On October 31 Essex scored a safety in the first period and outplayed Stoneham most of the rest of the game only to have a Minnesota-Nebraska finish pulled on them in the fourth quarter. The Stoneham quarterback ran back a punt and when tackled, tossed a lateral which was carried sixty yards altogether to win the game, 6-2.

On November 7 we tackled the strong Keith eleven. The Aggies made many mistakes during the game and Keith scored in every period but the third. Score: 20-0.

On November 13 we played the fast Worcester Trade. The first half remained scoreless but the Aggie boys had the edge. The second half was different. The Aggies put on a series of aerials and line bucks which resulted in a score. We missed the kick. Worcester came back and with aerials and end runs went over for a touchdown and kick. Score Worcester 7—Aggies 6.

L. MacAloney

WASH DAY IN GERMANY

Wash Day in Germany, as described by my grandmother is a complex thing. Having recently returned from that country she related to me the following interesting washday incidents.

In German villages wash day does not occur more than once in every six or seven weeks. This is because German peasants have no running water. Only the wealthy have modern plumbing in their homes.

The housewife first puts her clothes into a tub of water. She soon removes them, puts them on a large table and rubs them with a cake of soap. After the soap-rubbing, the clothes are scrubbed with a brush. They are again rinsed, following which procedure they are put into high baskets which are placed on a wagon. The wagon carries everyone's wash to a running stream outside the town or village, where the clothes are rinsed again and laid on the grass to dry and bleach. This process of rinsing and bleaching is repeated several times until the clothes are white. All night the women wash and rinse until at last, in the morning, the clothes are carried to a large building where the ironing begins. The German woman's process of ironing is very different from ours. No electricity is used. Rather, long wooden rollers known as mangles are rolled over and over the clothes, by hand. This makes the clothes as smooth as our ironed ones.

After all this hard work is done the women go home tired but glad that their six or seven weeks' work is done.

Lois Archambault

SCIENCE EXPOSITION

AWARDS

Herewith follows a list of prize winners in the School's recent Science Exposition, the success of which was due in large measure to Instructor James F. Gallant:

Exhibition Classes

Three ribbon Awards for each class
HERBARIUMS: Pressed specimens of Shrubs, Evergreens, Annuals, and Perennials. 1st, Rhea Gosselin; 2nd, Howard Stone; 3rd, Francis Gillen.

HERBARIUMS: Pressed and Mounted Weeds. 1st, James Barnes; 2nd, Francis O'Connor; 3rd, Russell Weinhold.

HERBARIUMS: Mounted specimens of Native Tree Leaves. 1st, Henry Smith; 2nd, Francis O'Connor; 3rd, Aubert Giles.

SEEDS OF VEGETABLE, FIELD, AND ORNAMENTAL PLANTS: 1st, Elmer Thomas; 2nd, Conrad Nollet; 3rd, William Lane.

PLANT PROPAGATION: 1st Albert Greenaway; 2nd, Norman Allen; 3rd, Frank Stacey.

WOOD COLLECTIONS: 1st, Charles True; 2nd, Gerald Wood; 3rd, Lloyd Ballard.

INSECTS AND DISEASES IN RELATION TO VEGETABLES: 1st, Paul Kelley; 2nd, Nicholas Dilisio; 3rd, William Corning.

INSECTS AND DISEASES IN RELATION TO FRUIT: 1st, Donald Gasper; 2nd, Merle Graffam; 3rd, James O'Neill.

INSECTS AND DISEASES IN RELATION TO ORNAMENTAL HORTICULTURE: 1st, Clayton Teague; 2nd, Ernest Tarbox; 3rd, Philip Webber.

INSECT AND DISEASE COLLECTIONS: 1st, John Kukene; 2nd, Russell Weinhold; 3rd, Conrad Nollet.

EXHIBITS FEATURING PLANTS AND ANIMALS LIVING IN WATER: 1st, Howard Stone; 2nd, Charles Welch; 3rd, Andrew Satama.

POULTRY SCIENCE: 1st, Gilbert Freeman; 2nd, Alerson Noyes; 3rd, Walter Alley.

FEEDS AND FEED INGREDIENTS: 1st, Henry Smolak; 2nd, Clarence Mitchell; 3rd, George Burkhardt.

OBSERVATIONAL RECORDS: 1st, C. E. Thomas; 2nd, Walter Hichens; 3rd, Leavitt Moulton.

UNCLASSIFIED — RELATED TO GENERAL HORTICULTURE: 1st, Gildo Santin; 2nd, Walter Winn; 3rd, Myron Eastwood.

UNCLASSIFIED — RELATED TO MARKET GARDENING AND ANIMAL HUSBANDRY: 1st, Teddy Smolak; 2nd, Norbert White; 3rd, John Fullerton.

HOBIES: 1st, Nicholas Dilisio; 2nd, John Wadsworth; 3rd, Philip Webber.

SCHOOL CLASS AWARDS: Freshmen: 1st, Francis O'Connor; 2nd, Russell Weinhold; 3rd, Clarence Mitchell.

Seniors: 1st, Paul Kelley; 2nd, Nicholas Dilisio; 3rd, Albert Greenaway.

Juniors: 1st, William Corning; 2nd, Alerson Noyes; 3rd, Rhea Gosselin.

Seniors: 1st, Donald Gasper; 2nd, Gilbert Freeman; 3rd, Clayton Teague.

SPECIAL AWARDS

These are chiefly book awards.
BEST HERBARIUM: Henry Smith
BEST ORNAMENTAL HORTICULTURAL ONE-IDEA DISPLAY: Clayton Teague.

COAT RENOVATION

As a unit of school work the Seniors majoring in clothing are renovating coats for children. The coats are being made for relatives, friends, and for welfare families.

The first step in renovation has been to remove, wash, and press the lining. The coat is then taken apart and a pattern laid on to the best advantage. Both the coat and lining are cut out, basted, and tried on for the fitting. Some of the collars prove to be problems. Most of the coats are being interlined for extra warmth and trimmer appearance.

The girls working on this project are: Edna Bowers, Lynn; Lemyra Briggs, Methuen; Eva Deloge, North Andover; Ruth Graf, Rowley; Shirley Hagar, Wenham; Helen Lucas, Peabody; Phyllis Steele, Middleton; and Lena Tela of Lawrence.

Ruth Graf

ORCHESTRA

The school orchestra has been meeting weekly since October 19. C. M. Wood, instructor, is director.

Both agricultural and homemaking departments are well represented this year, with the following students participating:

Piano: Norman Everett of Lawrence and Ruth Randall, Newburyport.

Violins: Lemyra Briggs, Methuen; Edith Stevens, Beverly; Olive Purdy, Ipswich; Warren Towne, Beverly.

Trombones: Paul Day, Saugus; Richard Paulsen, West Lynn.

Cornets: Donald Gasper, Beverly; Paul Parker, Topsfield.

Drums: Walter Hichens, Middleton
Banjo: John Kukene, Amesbury.

Clarinets: Joe Mattera, Swampscott; John Wilcox, N. Andover.

Guitar: Louise Spofford, Danvers.
Lemyra Briggs

BANQUET FOR NEW ENGLAND DAIRYMEN

The New England States Holstein Friesian Association will hold its annual business meeting on December 12 at the Hotel Bridgway in Springfield, at 3 P. M.

Following a banquet, at 6:30 P. M., the famous MacDowell Male Chorus of thirty-five voices will give a one-hour concert.

Those unable to attend the business meeting will be welcome in the evening.

Reservations may be made through the office of Thomas E. Elder, Room 211, 360 Worthington St., Springfield, or through Myron C. Peabody, chairman of Arrangement Committee, care of Federal Land Bank.

BEST VEGETABLE PEST ONE-IDEA DISPLAY: Paul Kelley

BEST ANIMAL ONE-IDEA DISPLAY: Gilbert Freeman.

BEST OBSERVATIONAL RECORDS: Elmer Thomas.

SWEESTAKES AWARD

Donald Gasper

Poultry Breeding Experiment By E. E. Metcalf

E. E. Metcalf, an Instructor at this School, became interested in 1928 in a breed of poultry known as Dutch Barnevelders, a breed which lays the most intensely brown eggs of any known breed. Because the brown egg is popular in market areas in and near Boston, and because Barnevelders are known to be non-broody, Mr. Metcalf studied the subject of poultry genetics and Mendel's Law of inheritance, believing that a desirable new breed might be created by crossing White Barnevelders with Rhode Island Reds.

In 1933 he crossed a White Barnevelder male with ten Single Comb Rhode Island Reds females. This "first filial" generation had hybrid vigor and about 50% of the eggs were deeper brown than ordinary Rhode Island Red eggs, the intense brown of Barnevelder eggs being a "dominant" genetic factor.

In 1934 matings were made of the "first filial" generation, giving a new generation composed of birds of wide color variations. The percentage of brown eggs increased from 50% to 75%.

Continuing this mating process, a fourth generation was developed, 90% of which gives the desirable brown eggs.

An exhibit, showing the yearly development in the creating of his new breed was shown, on request, by Mr. Metcalf at the Poultry Breeders' School, held from November 18 to 20 at the Massachusetts State College.

It is the work of such men which makes the wheels go 'round.

Bigger Cranberry Crop This Year

Soil, water, and temperature requirements necessarily limit cranberry growing to a few states. Of the five States where they are produced commercially, Massachusetts grows the major crop. This year there is an indicated crop of 370,000 barrels in Massachusetts, an increase of 38,000 barrels over last year.

Soil Testing

Announcement has just been made that the regular soil-testing service handled by the Agronomy Department of the Massachusetts State College, will be carried on until April 1st, as time permits. Since the service is furnished only on extra time available for such work, reports may possibly not be furnished immediately.

Samples should be first be sent to the County Agricultural Agent at this School.

Large-Fruit Yields and Picking Dates

A comparison of picking dates and yields in the School orchard during the past two years shows some interesting facts. Practically all varieties were a week to ten days earlier this year than last. The total yield of all the varieties listed averaged about fifty per cent of last year's crop.

Red Astrachans	
Picking date	
1935	1936
Aug. 1-8	Aug. 1-3
Yield	
30 bu.	3 bu.
Williams	
Picking date	
Aug. 12-14	Aug. 5-6
Yield	
35 bu.	36 bu.
Red Gravenstein	
Picking date	
Aug. 23-31	Aug. 13-19
Yield	
110 bu.	6 bu.
McIntosh (1915)	
Picking date	
Sept. 16-19	Sept. 10-15
Yield	
410 bu.	252 bu.
McIntosh (1925)	
Picking date	
Sept. 19-24	Sept. 15-16
Yield	
312 bu.	116 bu.
Cortland	
Picking date	
Sept. 23-24	Sept. 16-22
Yield	
137 bu.	110 bu.
Baldwin (1915)	
Picking date	
Oct. 7-10	Oct. 6-9
Yield	
447 bu.	311 bu.
Baldwin (1925)	
Picking date	
Oct. 10-15	_____
Yield	
205 bu.	_____
Totals	
1686 bu.	834 bu.

Part of the decrease was due to the late spring frost. Some varieties (those in bloom) were severely affected. However, the young (1925) orchard bore its first heavy crop of Baldwins and McIntosh last year, which accounts for a large percentage of this year's decrease. The biennial bearing habit of Baldwin shows up markedly in this orchard. The affect of the heavy crop of last year coupled with winter injury of two winters is apparent in the short crop of Red Gravenstein.

C. O. Cartwright,
Instructor in Fruit Growing

Producers and distributors of fruits and vegetables throughout Massachusetts will be pleased to learn that the daily broadcasts of conditions prevailing on the Boston produce market were resumed over station WEEL, November 4.

Garden Chat

Examine the frames of your hot-beds now, before the snow covers them, for possible repairs. The winter is an excellent time for taking care of broken bits of glass, repainting and making general repairs.

Have you thought about soil for the winter's use? When it's time to start your first cabbage and lettuce seed (in February) you'll want some soil handy; soil that is not snowed under and frozen through. Either bring into the barn or cellar, now, the needed soil, or cover an outdoor plot with fresh, hot manure to keep the frost from penetrating. Six or eight inches as a covering over a soil plot should be ample.

If you've not yet cleaned up the old weeds and cabbage stumps left from the past season, a few weeks in which this 1936 duty should be completed, still remain. Such materials, if left, offer themselves as hibernating quarters for insects whence they will emerge in the spring and laugh at your neglect. Why not prevent this embarrassment by destroying at once their winter accommodations? Either burn, or add them to the compost pile to rot.

C. M. Stearns,
Instructor in Vegetable Gardening

County Meetings

The evening vegetable-gardening class which meets bi-weekly and is sponsored by the County Extension Department, will hold its next meeting at this School, December 4 at 8 o'clock. (Room 28). Professor Grant Snyder, head of the department of vegetable-gardening at the Massachusetts State College will conduct the class.

The Goat Breeders of Essex County are meeting at this School on the evening of December 7. The history of Anglo-Nubians will be discussed of Mr. Thomas of Ipswich.

Essex County Rabbit Breeders will hold their annual meeting, with the election of officers, on the third Thursday of the month, December 17, at 8 P. M., room 28, of this School.

Extension Conference

The County Extension staff, including Mrs. Mary H. McIntire, Home Demonstration Agent, F. C. Smith, County Agricultural Agent, and H. J. Shute, County 4-H Club Agent and his assistant Miss Vera Bisbee, attended the annual conference of Extension workers at Amherst, November 23rd and 24th.

County Agent Smith, as one of the Conference speakers, discussed the "What and Why of Committee Organization."

DECEMBER 17
RABBIT BREEDERS
ANNUAL MEETING

Round About The County



4 - H CLUB NEWS



Mrs. Mildred Greely Snell of Lynn has been engaged by the Extension Department to give instruction in food and nutrition problems, in the county.

Mrs. Snell is a graduate of Framingham Teachers' College and has previously taught in the Lynn day and evening schools.

At the present time she is meeting groups at the Essex County Agricultural School on Monday evenings, weekly, at the First Baptist Church in Beverly on Wednesday afternoons, and at the Y. M. C. A. in Marblehead Monday afternoons.

Essex County residents have been extended a cordial invitation by the Middlesex County Extension Department to attend meetings which will be held on December 1, 2, and 3 at the Grace Church in Framingham, the Carey Memorial Church in Lexington, and Liberty Hall in Lowell, respectively. "Consumers' Problems in Clothing" will be the subject under discussion at these meetings. Miss Gladys Winegar of the Textile Education Bureau of New York City, will be the speaker. She will deal particularly with problems connected with cotton and linen yard goods and ready-to-wear garments. Miss Winegar's lectures are the result of wide research and are illustrated with rare and outstanding materials.

A group of Gloucester women successfully completed a slip-cover project this month under the guidance of Mrs. Mary M. McIntire, Home Demonstration Agent.

Before actual work of cutting and fitting the covers was started, the value of slip-covers as a substitute for new upholstery was explained, color schemes and selections of materials studied, and "finishes" discussed.

Several club chairs and divans were satisfactorily covered by the group.

Women of other communities who might be interested in carrying a similar project are asked to communicate with Mrs. McIntire, Hathorne.

Clothing groups in Ipswich, Newburyport, and Hathorne are meeting regularly with Mrs. McIntire for instruction.

On December 1, Miss Ruth McIntire, State Recreation Specialist, will address a group of mothers interested in community recreation. The meeting will be an open one, at the home of Mrs. Fred Coggsell, Danvers.

Local Leaders

Local leaders are asked to send in their requests now for any new material they may need for their clubs during the 1936-1937 season.

No clubs will be organized after December 30th this year.

Leaders are requested to send in their club enrollments immediately after organization.

On December 11 Marion E. Forbes, Assistant State Club Leader, will conduct a leader-training meeting at this School. (Subject: Home Furnishing). All leaders interested in a home furnishing project for their clubs are invited to attend.

A program for the meeting, in outline form, follows:

1. Understanding the new bulletin.
2. Model rooms and scrapbooks.
3. Color combinations for rooms and crafts.
4. Good decorative design.
5. Craft articles that Home Furnishing club members can make.
6. Stand Up to Life: the 4-H Health Program.

Fall Organization

Now is the time to organize clubs. Club enrollment will close December 30th this year. Absolutely no new enrollments will be accepted after that date. However, if your community is interested in entering the Better Meetings Contest, start your club's program immediately. A word to the wise!

The following projects for 1936-1937 are being offered:

Poultry: Keeping and caring for poultry; keeping of records of costs and profits.

Handicraft: Making of household articles and implements.

Conservation: Learning identification of trees, flowers, birds and insects.

Food: (for both boys and girls): Preparation of simple foods; planning and serving of meals.

Home Furnishing: A study of the correct and artistic arrangement of room furnishings.

Clothing: The art of sewing skillfully.

Amesbury Club Making Wreaths

The Field and Forest 4-H Club, of Amesbury, are making Christmas wreaths with the interest of raising funds for their new club house.

With other clubs in Amesbury, they will also sing Christmas carols, as their community service for December.

V. L. Bisbee

Russell Gould, Richard Clayton, Delegates To New York

Russell Gould and Richard Clayton, both of Saugus, were awarded a week's trip to the New York poultry show in New York City, November 11th.

Russell was awarded the trip for excellence in poultry judging and Richard for excellence in general poultry work.

It was Gould's distinction to make the highest average score in all the poultry judging contests that were held at the various state fairs this fall. In New York he was a member of the winning judging team.

Clayton was in charge of the Massachusetts 4-H poultry club demonstration work at the New York show. He has been in club work only three years and entered the Stockbridge Agricultural School in Amherst this fall. During the past two years he has won many prizes in the egg-production contests and was county poultry delegate to the State 4-H camp in Amherst last summer.

Gloucester Supper Club

A girls' food club in Gloucester has reported that its program for the year is already mapped out. Each member of the club will superintend one meeting during the year.

Topical subjects for the club's meetings follow:

Hearth, Music, Christmas Supper, Balanced Meals, Posture, Tea, the Comfortable Kitchen, Demonstrations, and Outdoor Cookery.

Each of the fourteen members of the club have made covers for their foods notebooks, one of this year's requirements for additional points.

The County Club Agent and his assistant suggest that more reports like this one be sent in.

Better Meetings Contest

Introducing a new contest: the "Better Meetings Contest". Starting in November. Ending in June.

Reward to club winning: A week-end trip to the Farley Club House in Amherst. Judges decisions to be based on:

1. Project completions.
2. Weekly reports.
3. Monthly reports on health and posture programs.

Extra points to:
Clubs rendering community service.
Clubs sending in newspaper clippings and pictures of club activities.

Essex County Agricultural School

Hathorne, Massachusetts

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March 21, 1946

UNITED STATES DEPARTMENT OF AGRICULTURE
MASSACHUSETTS DEPARTMENT OF EDUCATION
MASSACHUSETTS STATE COLLEGE
ESSEX COUNTY AGRICULTURAL SCHOOL

CO-OPERATING

MAIL	HATHORNE
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Mr. Basil B. Wood, Librarian
Goodell Library
Massachusetts State College
Amherst, Massachusetts

Dear Mr. Wood:

Under separate cover I am sending you the copies of the Essex Farmer and Homemaker you requested.

Among those you asked for were v.16 nos. 10 & 11. I find that both September and October of that year were numbered 9 and November 10, and December 11. I am sending you copies of all these as I am not sure just which ones you need.

In December 1936 all I can find is the supplement and in our bound copies that is all we have. That was before my time here and none of those who are here now that had any part of the work at that time can remember why there are no main part of the paper in existence.

I shall be very glad to put the Library on our mailing list to receive a copy regularly each month. If I can be of further service please call on me.

Sincerely,

Madeleine R. Torrey
Madeleine R. Torrey
Director of Publicity

General Instructions

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SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

DECEMBER, 1936

STUDENT EDITORS

Homemaking Department

Louise Spofford, Danvers
High School Special
Elizabeth Pyburn, Peabody
High School Special
Elizabeth Colby, Newbury
Senior
Phyllis Steele, Middleton,
Senior

Agricultural Department

Leonard Duratti, Swampscott
Junior
James Keane, Nahant
Senior
Norbert White, Lynn
Senior
Paul St. Linger, Beverly
Senior

CHRISTMAS PARTY

On the afternoon of Friday, December 18, the Echo Club sponsored a Christmas party. A play, presented by the members of the club, was entitled "A Sensible Christmas" and included the following cast:

Beth — Janet Spalding, Newburyport
Jessie — Lena Tela, Lawrence
Mollie — Frances Carty, No. Andover
Ruth — Wyota Purington, Rowley
Betty — Grace Taylor, Peabody
Mrs. Pratt — Ruth Cann, Danvers

The action centered around a young couple who decided they would have a sensible Christmas by getting presents only for themselves and getting just what they wanted. Their plan worked out until they realized there were people in need around them. They took the presents they had bought for themselves and gave them to poor people who needed them. The young wife invited her sister with her large family for Christmas dinner. They all enjoyed the party and the young couple decided that Christmas should not be too sensible.

The party was held in Agricultural Hall, the Echo Club being hostesses to the Future Farmers of America. Following the play dancing was enjoyed until 5:30.

The entertainment committee were:

Lena Tela, Lawrence
Janet Spalding, Newburyport
Barbara Clark, Lynn
Esther Boyle, Saugus
Wyota Purington, Rowley.

Louise Spofford

ALUMNI NOTES

Clarence Tibbetts, class of 1927, formerly with the United Farmers, is now working with a milk cap concern in New York.

George Ward of North Beverly, class of 1926, is employed by the Friend Box Company.

Clara Wilson, a former student, of Essex, was married to Kenneth Arnold of Gloucester, June 17, 1936. Their home is in Essex.

David Carter, class of 1933, is land-scaping for Mrs. William H. Taylor at Bar Rocks.

Helen Andrews, 1928, is employed as a private nurse. Her address is 29 New Derby St., Salem.

P. Burleigh Odiorne, class of 1923, of Wilmington, was recently elected president of the Alumni Association.

Irving Jacquith, class of 1929, is now head gardener at the Beardsell estate in Beach Bluff where he has been employed for the past six years. Before returning to Massachusetts, "Jake" was employed on a lemon grove in San Diego, California.

Mr. and Mrs. Arthur Peatman are now residing at River Street in Ball'srdvale. Mrs. Peatman, the former Dorothy Lewis, was a member of the class of 1934.

John Peatman, class of 1935, is with F. I. Carter and Sons of Tewksbury.

Paul Fischer, class of 1933, is to be commended for his managership of Sunny Beach Poultry Farm, Summer St. Extension, Auburn, Maine. (There are two thousand layers in the cages.)

Leonard Duratti

FIRST TERM HONOR ROLL

During the first term, which ended November 20, the following students in the agricultural department attained honor roll grades:

Paul St. Linger, Warren Towne, Gilbert Freeman, William Corning, Robert Corneliusen, Edward Cook, Howard Wilson, Raymond Kennedy, Peer Johnson, Roger Coleman, Barbara Jewett, Alden Crosby, all of Beverly.

Conrad Nollet, Norman Peatman, Albert Batchelder, Andover.

Henry Smolak, Theodore Smolak, No. Andover.

John Kukene, Amesbury.

Charles True, Salisbury.

Lloyd Briscoe, James MacAloney, Groveland.

Arthur Walker, Robert Spencer, John Ylitalo, Aubert Giles, Danvers.

William Lane, Manchester.

Arvid Ljunggren, Paul Day, Henry Smith, Saugus.

David Foss, David Elwell, Frank Story, George Georgantis, Edwin Wentworth, Francis O'Connor, James O'Neill, Merle Graffam, Sidney Johnson, Gary Sano, Lynn.

J. Philip Webber, Walter Hichens, Middleton.

Albert Greenaway, Marblehead.

Ernest Campbell, Russell Weinhold, James Barnes, Warren Nelson, John Wadsworth, William Whiteside, Albert Lee, Ronald Skea, Archie Nimmo, Clifford Nelson, Donald Nelson, Walter Winn, Methuen.

Francis Gillen, Augustine Sheehy, Gerald Hamel, Norman Everett, Lawrence.

John Fay, John Munroe, Walter Kneeland, Salem.

Clarence Mitchell, Hamilton.

John Balzarini, Jacob Ranta, Rockport
John Zielski, John Fullington, Allyn Trask, Peabody.

Levon Amirian, Rhea Gosselin, Haverhill.

Leonard Duratti, Swampscott.

Sargent Griffin, Gloucester.

Paul St. Linger

HOME LIFE IN INDIA

An interesting meeting of the Echo Club was held November 19. The President, Helen Lucas, opened the meeting and dismissed all business to introduce Mrs. Kenneth Forman of Danvers who gave a description of the village life of the women of India where she herself lived for seven years.

Opening her talk she addressed the audience in the language of the people of India. Dressed as a typical woman of a village in India she described their mode of living. Their type of food, their modes of travel, their type of dress and even their ways of washing clothes were briefly portrayed. Changing to a striking costume typical of a city woman she next told about the life of the people in the city.

On display, Mrs. Forman had with her some articles which she had brought from India: sheer scarves of various colors, some small trinkets and dishes of different shapes and sizes as well as trays of silver. The club members were cordially invited to inspect these articles at the close of the meeting.

E. P.

CHRISTMAS PROJECTS

Girls of the High School Special Division A organized, this term, a holiday project under the supervision of their instructor, Mrs. Dunn.

These students filled a box for a sixteen-year-old girl. They brought articles such as toys, books, or clothing; dressed a doll, repaired a bed, and made its accessories. The second-hand toys they repaired. This Christmas box was given, through a charitable organization, to some deserving child.

Both Freshmen Divisions carried on a Christmas project this year, under Mrs. Clapp's instruction. They adapted their class antique work to children's aprons, pot holders, and string bags, which were done in brilliant and fascinating colors.

All divisions made Christmas candy in their food classes.

The Seniors and High School Specials had a home project with Mrs. Roundy, the school nurse, and made animals and dressed dolls for children who would otherwise not have them.

Phyllis Steele

SPORTS

With the days of following the pigs-kin over for another year, our attention goes to basketball. Just before cold weather set in I observed on my many trips across the grounds, that much time was devoted to the art of pushing the ball through the hoop. On close observation I found Hazel Mason, Sybil Childs, Kay Johnson, Janet Spalding, Louise Minichello, Barbara Sturtevant, Ruth Randall, and Jo Reilly hard at work perfecting their game. On going through the lower corridor of the main building I found my fellow students peering with interest into the gym. At the risk of my life I waded through the tide of masculinity to find the cause of all this interest. What did I find? These same girls pushing the ball through the hoop. A few years ago there was another Johnson who played basketball, namely Betty Johnson. Now Betty and her pals got together and played all the high schools around here with a great deal of success. For practice they ran the Couhig five all over the gym until they were ready to say "Uncle." What Betty's pals can do Kav's pals can do. Get together, girls, and have a team. Plenty of support will be provided from the agricultural department and a cheering section from the Aggie varsity.

The class basketball is under way with the Junior class in the top flight. After doing the Seniors up in short order they followed up their victory by taking the Specials in their stride. With a sure-clicking combination composed of Sano, Wilson, Monroe, Tataronis, and Prophet it looks as though the class championship is in the proverbial bag.

After inquiring around I hear that Mr. Couhig has the material to whip together another high-stepping team. In the past few years the coach has turned out some fine teams. They seem to have one fault — and that is Keith Academy.

In a morning assembly not long ago Mr. Mostrom told the boys how he and some of the other instructors in previous years wined up the floor with the students. Because of increasing age they had to refrain from such violent exercise. Gus Sheehy picked him up and gave him an invitation to do it again. Mr. Mostrom said he could still use Gus as a dust mop. Now do the rest of you instructors feel older than Mr. Mostrom? I think the boys can take you.

Norbert White

GENERAL ASSEMBLY

On December 9 a general assembly of the F. F. A. was held. President White introduced Peer Johnson of the Sophomore class who, capably aided by Instructor Gifford, presented a most interesting illustrated set of motion pictures taken during the early days of September when the new students of both departments were first entering the school.

Mr. William Sanford of the Farm division then spoke to the boys on the value of an agricultural education. The boys greatly appreciated his talk.

J. K.

SUMMER PROJECT HONOR ROLL

Grades of honor roll rank were awarded to the following students for their summer project accomplishments:

Elmer Aldrich, Andrew Bye, Robert Corneliusen, William Corning, Gilbert Freeman, Raymond Kennedy, Leavitt Moulton, Warren Towne, and Howard Wilson, all of Beverly.

Elmer Thomas, Beverly Farms.

Ernest Tarbox, and William Auger, Saugus.

Lorin Clark, Merrimac.

Richard Colby, Rhea Gosselin, Charles Pettengill, Haverhill.

Walter Hichens, Louis Rosi, and Philip Webber, Middleton.

John Wilcox, Henry Smolak, North Andover.

Norman Peatman, Conrad Nollet, James Nealy, Andover.

Jacob Ranta, Lewis Norwood, Rockport.

Kenneth White, D. Woodward Walker, Salem.

Allyn Trask, Peabody.

Leroy MacAlony, Groveland.

James Keane, Nahant.

John Crosbie, Francis Gillen, Lawrence.

Nicholas Di Lizio, Swampscott.

Myron Eastwood, Clifford Nelson, Methuen.

David Ellwell, Lawrence Shanks, Essex.

George Foster, Vincent O'Donnell, James O'Neill, Lynn.

Gordon Hall, Ballardvale.

Paul Parker, Topsfield.

John Natti, Gloucester.

Paul St. Linger

HONOR ROLL HOMEMAKING DEPARTMENT

The following girls in the Homemaking Department are on the first term honor roll:

High School Specials: Catherine Hanson, Helen O'Hearn, Irene Snell, Ruth Tronerud, Louise Minichello, Elizabeth Pyburn, and Janet Spalding.

Seniors: Barbara Clark, Yolanda Scamperino, Winifred McKay, Lena Tela.

Juniors: Charlotte Finn, Kay McLaughlin, Ellen Wills, Eleanor Hoelzel, Grace Taylor.

Freshmen: Grace Raimery, Edith Sharp, and Edith Skidmore.

P. S.

WRESTLING SQUAD

Fifteen candidates answered Manager Sheehy's initial call for wrestling. After a demonstration by Coach Couhig the boys paired off and practiced holds on each other. In the several bouts that followed, Archie Nimmo, famous for his backfalls, showed that he is intent upon retaining the 125 pound crown.

Candidates for the squad were: Joseph Arnold, Walter Mansfield, John Marshall, Archie Nimmo, Merle Graffam, George Foster, Harold Dossett, John Zielski, Thomas Dederian, Robert Craven, Wesley Searles, William Tennyson, Ernest Kray, Richard Mulally, Chester Clinch, and Augustine Sheehy, manager.

P. St. Linger

CANDY-MAKING

The girls in the homemaking department have started their lessons in candy-making. As in previous years the candy will be given away to children's homes and homes for the aged. It is sent in attractive Christmas boxes made in the freshmen art classes.

One of the most important candies which the girls have made is cooked fondant, to be used in stuffing dates and prunes, and for bonbons. (A recipe for fondant appears on page 2 of this issue.)

Divinity fudge and a "rice crispie" candy have been included in this year's assortment, the recipes for which are appended:

Divinity Fudge

2 cups sugar
2/3 cups corn syrup
1/2 cup water
2/3 cup sugar
1/3 cup water
Whites 2 eggs
1 teaspoon vanilla
2/3 cup chopped nuts

Put two cups sugar, two-thirds cup corn syrup, and half a cup of water into a saucepan. Cook contents of first saucepan to 244° F. or until mixture forms a soft ball when tried in water. Ten minutes after starting this mixture begin cooking contents of second saucepan (2/3 cup sugar and 1/3 water) and cook to 270° F. or until mixture forms a hard ball when tried in cold water. Beat whites of eggs until stiff, add contents of first saucepan slowly and beat with a wooden spoon until stiff. Then slowly add contents of second saucepan, continuing the beating. Add nut meats and vanilla, turn into buttered pan and cut when cold.

Rice Crispie Candy

4 tbs. molasses
4 tbs. sugar
4 tbs. water
1 tbs. butter
1/2 package rice crisps

Heat rice crisps in oven. Boil other ingredients to hard ball stage. Very quickly add rice and mix well. Pour into well-buttered pan. Press down firmly with hands. Crease size of pieces before candy is hard.

Elizabeth Colby

MT. HOPE FARM

On November 26, students Cook, Curtis, Batchelder, Killam, Pingree, Woundy, and Wilcox, with Instructor Kenneth W. Forman, journeyed to the Mt. Hope Farm in Williamstown. Mr. Goodale, the geneticist, explained the history and functions of the farm's breeding experiments. He also showed and explained their newest experiment: the efficiency ratio between growth and milk production.

The students also visited the Coronation farm in the same town, where they saw a very fine herd of registered Guernseys.

W. Killam

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 18

HATHORNE, MASS., JANUARY, 1937

NO. 1

U. S. Department of Agriculture Predicts Propitious Year for 1937

Domestic and Foreign Demand On Increase

Agriculture is said to have made greater strides than any other industry in 1936.

The 1937 outlook is definitely propitious.

Demand for farm products will exceed that of 1936. The change in domestic demand has been determined largely by the change in income of consumers. Figures compiled by the Bureau of Agricultural Economics show that in 1936 there was an increase of \$15,100,000,000 over the national income paid out in 1933. An additional increase of ten per cent is expected in 1937.

The extent of change in foreign demand will be determined by the recent trade agreements between for-

eign countries and America and the indirect effects of devaluation and tentative stabilization of currencies.

The credit outlook may be summarized in the prediction of a continued and plentiful supply of credit for sound agricultural loans at low rates of interest.

Farm labor, equipment, and fertilizer will summon increased wage rates and higher prices. Wage rates are bound to rise with the increasing demand for workers in non-agricultural fields. And feed prices will be higher until the 1937 harvests have replenished the drought-reduced supplies. But there is a sound belief that demand, in 1937, will make its dent.

1936 Precipitation Highest in 13 Years

In spite of the fact that each of the growing months of the year, except August, showed a shortage of rainfall from a fraction of an inch to more than an inch, the total precipitation for the year 1936 was over 48 inches, the highest with one exception in thirteen years. The high total was due to the heavy fall in January, March and December. The rainfall in January and December established new records for these months when more than one-third of the year's total fell. May, June and July were the dry months of the year, there being a total rainfall in these three months of slightly more than six inches. November was also an unusually dry month. Snow fell in January, February, March, and November in measurable amounts; the total was only 38", considerably below the usual expectations.

The temperature ranged from 6 below zero in January to 98 above in July, a total range of 104°. The average daily temperature for 366 days was 48.1°, a figure very close to the average for the past ten years.

The last killing frosts in the spring, as observed at the school weather station, occurred on May 16 when considerable damage resulted. Lighter frosts occurred on May 21 and 22. First light frost in the fall came on September 26 with some damage resulting. Another occurred on October 4 but the first severe freeze-up came on October 13, the thermometer dropping to 29° here.

Sunshine and humidity figures were close to normal for the year.

H. A. Mostrom

Strawberry Yield Increased By Plant Spacing

Larger the Number of Leaves
Greater the Number of Berries

Spacing of runner plants is not a new method of strawberry culture. Double-hill and spaced rows have long been standard cultural systems. But only recently has it become known that spacing the runners makes larger yields.

George M. Darrow, Senior Pomologist, Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, U. S. D. A., of Beltsville, Maryland, alleges that the larger the number of leaves per plant, the greater the number of berries. In actual experiments, spaced-row plants have yielded seventy times as much as matted-row plants. Since the number of leaves is a measure of the total leaf area or size of a plant, it is possible to forecast the spring yield through the number of leaves or vigor of the plant the previous fall. Efforts should be directed toward obtaining as large plants as possible in the fall as well as to having the plants properly spaced in the row.

Strawberries

(Continued on page 3, col. 2)

Fruit Growers Formulate New Program

Study Groups
Will Meet Here

Gilbert Wallace, Secretary of the County Fruit Committee, announces the 1937 program formulated by fruit men at a recent meeting.

Study groups will meet periodically at this School to discuss tree growth, new varieties, control materials, selling and advertising, orchard management, and moisture control. (The date of the next meeting, scheduled for February, will be announced in the local papers.)

Charts will be prepared by the Extension Service containing a study of temperatures (critical) for strawberries, placement of thermometers, and types, heights, and kinds of heaters which should be used.

The Fruit Growers' Association will draft and present a bill to the General Court which will control the owners of those trees adjacent to commercial orchards upon complaint of the commercial orchardist.

The food and drug division of the Massachusetts Board of Health will be requested to inspect cider mills.

The 90% Clean Apple Club will be retained for commercial growers and an 80% Club instigated for small growers with less than 200 trees.

Basketball Schedule

Jan. 29 at Worcester Trade School

Feb. 5 at Winthrop

Feb. 6 at Boston Boys' Club
(Green Street, Charlestown)

Feb. 10 Keith Academy (here)

Feb. 12 Melrose (here)

Feb. 16 at Swampscott

Feb. 20 at Roxbury Boys' Club
(80 Dudley St., Boston)

Feb. 24 Peabody (here)

Feb. 26 Stockbridge (here)

Mar. 2 Somerville Vocational
School (pending)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of the Essex County Agricultural School

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SUBSCRIPTION 25c PER YEAR

Persons desiring this publication should address the Essex County Agricultural School, Hathorne, Mass.
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Essex Agricultural Society
Secretary, Ralph Gaskell Topsfield
Essex County Poultry Association
Secretary, J. Stanley Bennett Hathorne
Essex County Rabbit Breeders' Association
Secretary, Fred N. Phillips Marblehead
Northern Essex Beekeepers' Society
Sec. Treas., Stephen Dyer Lawrence
Eastern Massachusetts Society of Beekeepers
Secretary, E. S. Batchelder Cliftondale
Essex County Milk Goat Breeders' Association
Secretary, R. H. Campbell Topsfield

Calendar

January 29—Initiation of Service Club Members (4-H) 7 P. M. at this School.
January 29—Annual Meeting Essex County Cooperative Farming Association. Topsfield.
February 2—Egg-grading and Canning School at Essex County Agricultural School. 10.30 A. M. Assembly Hall.
February 9 — Ralph Parker of the Barrett Company. Motion and Sound Pictures of the Manufacture of American Nitrate of Soda. 1.45 at this School.
February 12—Dairymen's Meeting at Essex County Agricultural School. 10.30 A. M. Ralph H. Donaldson on "Grazing Crops."
February 12—Monthly Meeting of the Essex County Goat Breeders at this School. 8 P. M.
February 18—Meeting of the Rabbit Breeders at this School 8 P. M.

23rd ANNUAL

Farmers' and Homemakers' Day

Wednesday, March 17, 1937

Homemaking Department

Pop Corn: Its Origin and Uses

Where did pop corn originate? Our ancestors would say "Quadequina, brother of Massasoit, brought as his contribution to the first Thanksgiving dinner, February 22, 1630, a deerskin bag containing several bushels of popped corn." They might quote Governor Winthrop's "Journal" that in 1630 a standard food was parched corn which turned inside out and was white and floury within. Others might say that Columbus carried corn back to Spain on his return voyage in the 1490's. If we asked an Indian Squaw she would insist that corn came from the Great Spirit, for it was the Great Spirit's berry. It was her pleasure in the spring to loosen the earth and plant the sacred seed. On the first beclouded night she customarily slipped out from her lodge, disrobed, and ran around the edge of her corn patch dragging her garment thus making a charmed line over which no insects would pass to harm her crop. The Squaw would want us to know that at husking time an Indian girl finding a red ear of corn presented it to a strong young warrior; and that a bent thin ear gave warning of robbers in the field.

We are interested in the types of pop corn. An Indian would tell us of three kinds: red, white, and yellow. An old New Englander would add a black type. A seed man would describe twenty-four varieties, but the Pop Corn Man on the Turnpike would say there is one type of corn for him: South American Pop Corn.

Corn stored in the cold, or sealed in a tin to prevent dryness, is ready to pop, and may be popped in a greased, heavy iron skillet or kettle, a sheet iron popper, a wire mesh or an electric popper. The corn, pushed back and forth over a flame, live coals, or best, over heated iron, should begin to pop in ninety seconds if best results are to be obtained. Beware of unpopped kernels: these, and caramels, are the dentist's best friends.

Popped corn contains 4.3% water; 10.7% protein; 5% fat; 78.7% carbohydrates and 1.3% mineral.

It is perhaps best, salted and buttered, but may be caramelized in balls, served with cereal, rolled in cheese, dunked in soup, coated with chocolate or eaten as crackerjack.

H. M. Butman,
Instructor in Foods

Pop corn is peppier and poppier when it has a moisture content of 13 to 15 per cent. The kernels lose much of their explosiveness when they become too dry.

Alumni Notes

Best wishes to Arnold Brown, former student, who recently enlarged his greenhouses in Marblehead. With the cooperation of his wife, the former Helen Pierce, class of 1921, Brown has become a success in his work.

Carl Oliver, class of 1918, is manager of Oliver's Filling Station, Humphrey Street, Clifton. His home is on Marion Road and speaks well for Carl's Essex Aggie training.

Josephine Hogan, class of '36, has added to her accomplishments the duties of second cook at Oliver's Tea Room, Humphrey Street, Clifton. "Jo" has used her knowledge of cooking to best advantage and is doing very well.

Marjorie Hudson and Freda Peterson, both graduates of the class of 1936, are employed in private homes in Clifton.

Margaret Thibedeau, class of 1931, will soon finish her training period at the Marlborough Hospital. Margaret's home address is Virginia Avenue, Beverly.

Besides being tree warden in Saugus, Edward Batchelder, class of 1929, is also engaged in an enterprising business selling honey and bees.

Gilbert Wallace, class of 1935, has the largest fruit orchard in Haverhill and, needless to say, the most profitable in that section.

Albert Daggart is employed by Heinrich Rohrbach, Sunset Rock Road, Andover. Since being graduated in 1933 he has worked with Mr. Rohrbach as landscape architect.

Joseph Cote of Danvers, and Joseph Spakas of Lynn, class of 1934, are employed as assistant gardeners at the Danvers State Hospital.

Aggie Quintet Spells Victory

Of the four games to date, the Aggies have added up three victories. Playing on this year's team are: George Georgantis, all-county guard in 1935, of Lynn.

Thomas Lee, all-state guard in 1936, Lynn.

John Munroe, forward, Salem. Gildo Santin, center, Beverly. Jacob Ranta, guard, Rockport. Substitutes:

Howard Wilson, Beverly. Stanley Prophet, Haverhill. Manager:

Warren Killam, Danvers. Playing on the second team, are: James Cashman, forward, Peabody. Frank Conti, forward, Lynn. Walter Tataronis, center, Salem. Gary Sano, guard, Lynn. Paul St. Linger, guard, Beverly. Leroy MacAloney, center, Groveland.

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

JANUARY, 1937

STUDENT EDITORS

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Agricultural Department

Leonard Duratti, Swampscott
James Keane, Nahant
Norbert White, Lynn
Paul St. Linger, Beverly

CURRICULUM CHANGES IN HOMEMAKING DEPARTMENT

February first brings to a beginning the second half of our School year. At this time several changes will take place in the curriculum.

The changes affecting the High School Specials involve an interchanging in the A and B divisions of the courses: Family Relationship and Socio-Economics. Members of the foods classes who have been preparing meals once a week for the faculty will interchange with the divisions serving in the students' cafeteria.

A change in the Senior class will include additional English periods for the study of story-telling.

Junior divisions will have minor changes while the Freshmen anticipate the practical application of food theories learned in the classroom.

The laboratory assistants, Agnes Burke and Mary Minichello, who have been preparing meals for the faculty one day a week will, during the term, do likewise for the student body.

E. P.

SENIOR ACTIVITIES

The Senior Dance Committees who prepared for this social event which occurred January 22, and for which the Lewis Moonlight Hawaiians, well known to all, provided music, are to be commended for their work.

Acting on the reception committee were: Ruth Tronerud, Helen O'Hearn, and Phyllis Marks.

Orchestral committee: Beverly Bird, Irene Snell, "Teddy" Smolak, and James Keane.

Decorations: Ruth James, Ruth Randall, Shirley Hogan, Donald Gasper, and Archie Buder.

Refreshments: Dorothy Page, Ruth Cann, Winifred McKay, Lemyra Briggs, Carroll Killilea, and John Fullington.

Tickets: George Foster, Merle Grafham, Priscilla Hopkins, and Barbara Clark.

Checking committee: Betty Colby, Beatrice Morrison, and Frank Conti.

James Keane

FEBRUARY FOODS

(If Winter comes)

Fruit Roll

¼ lb. raisins (2/3 cup)
¼ lb. dates (2/3 cup)
¼ lb. figs
¼ lb. candied cherries
¼ lb. candied pineapple
½ lb. walnut meats
½ lb. almonds
1 lb. sugar
½ cup cream
2 teaspoons butter

Blanch almonds and remove skins. Dry out in oven. Cut finely the fruits and nuts (do not chop). Mix thoroughly. Mix sugar, cream, and butter in a bowl. Work mixtures together with hands, roll in a damp towel. Roll all in wax paper, place in refrigerator, and cut as used.

Gold Cake

½ cup butter
1 cup sugar
3 or 4 egg yolks
1½ cups flour
½ teaspoon soda (good size)
1 teaspoon cream of tartar
1½ cup milk
½ teaspoon lemon

Cream butter and sugar. Sift dry ingredients. Add egg yolks (beaten), milk and flavoring. Pour into buttered tin. Bake 40 minutes.

Lime, Cheese, and Grape Salad

1 pkg. lime jello
1 pkg. cream cheese
1/3 cup miracle whip
1 cup green grapes (½ lb.)
1/3 cup walnut meats
1 head lettuce

Make jello and divide in halves. To first half add cream cheese and allow it to melt and cool. To second half add grapes cut in halves, third fill molds and allow to cool. Beat first mixture when partly jellied and add nuts. Finish filling molds with this mixture. Chill, unmoil on lettuce, and garnish with salad dressing.

AMATEUR SHOW

On February 26 the Plays and Entertainment Committee, as host to the Echo Club, will present an amateur show in the Major Bowes manner. Plans are now under way for the appointment of judges. Prizes will be awarded the leading contestants. Students in both agricultural and homemaking departments are eligible to participate in the show.

Hustle now and try out for the audition. You may leave your name with Mr. Knowlton or with James Keane, chairman of Plays and Entertainment Committee. Only through wholehearted cooperation on the part of the students can this show be the success we hope it to be.

James Keane

ECHO CLUB NOTES

On January 16, the Echo Club sent three delegates to the mid-winter meeting of the New England Home Economics Association which was held at Simmons College. There was a special student section and Miss Hazel Roach, Field Secretary of the American Home Economics Association, was the speaker.

The delegates from this school were: Ruth James, Marblehead
Mary Lafond, N. Andover
Helen Lucas, Peabody

On Wednesday, Jan. 27, the monthly meeting of the Echo Club will be held. Students will participate in discussing the subject, "Around the World with Home Economics."

E. C.

SALTING NUTS A TASK WHICH FINDS REWARDS

What could be more enjoyable than a winter's evening spent salting nuts? It is a task in which the whole family can participate and the joy of watching the nuts turn to a golden brown nearly equals that of eating them later. Added to this is the ease and little time required to salt nuts.

Nuts are rich in protein, comparing favorably with the protein content of meats.

Preparation of Nuts

Raw peanuts with the red skins on are best for salting. Remove the skins by allowing the nuts to stand in boiling water for five minutes. Then rub to remove skins. Almonds are blanched in a similar way. Cashews and pecans do not require blanching. Be sure the nuts are dry before salting.

Method I — Oven-baked

Mix nuts with a small amount of oil (1 Tablespoonful to 1 quart of nuts), spread in shallow pans and bake from 12 to 15 min. or until delicately browned in hot oven. Stir frequently and sprinkle with salt.

Method II — Saucepan cooked

Blanched nuts may be put into a sauce pan and covered with oil and cooked on top of stove. Unless nuts are in a colander they must be continually stirred to keep uniform color. Drain well when of desired color and put onto brown paper to absorb extra fat. Salt while warm. The drained oil may be used for nuts over and over again. Although olive oil is preferred, other salad oils are satisfactory.

Different varieties of nuts should be salted separately. Each requires very little time either in oven or in oil.

E. C.

ANDREW DUNK STIMULATES STUDENTS

The year 1937 was started off in an inspiring way when Mr. Andrew Dunk, manager of the Salem division of the Metropolitan Life Insurance Company, addressed the students at a joint assembly of the agricultural and homemaker departments.

One of the first points that Mr. Dunk stressed was that of not saying "Yes" too quickly. Too many people today, in his opinion, give too little thought to making decisions, answer "Yes" too readily, and hence incur debts.

Mr. Dunk impressed on the students that they would get out of life no more than they put into it. There will be knocks and bumps, to be taken in one's stride. If one has only what he needs he should be content to accept it, and strive for what he wants. There was a decided point in the speaker's theory that "in order to get a-head, use the one you have."

Dividing people into two classes, he warned the first class which he called wreckers, against destroying the accomplishments of the builders' class. Give thought to your task, lay your plans, and accomplish something.

Despite the belief that youth and age do not mix, Mr. Dunk found wisdom in the lines,

"If youth but knew what age would crave,

Many a dollar youth would save."

The important thing in life is to find the thing you want to do, let no one interfere, then go ahead and do it.

Louise Spofford

Kitchens should be cheerful and comfortable as well as convenient. A high stool is an aid to comfort in preparing vegetables or mixing ingredients. An attractive corner where the homemaker can sit to read over a new recipe, make out her order list of groceries, or wait for a dish to finish cooking, adds considerably to a comfortable kitchen.

Christmas tree plantations offer money making possibilities for Massachusetts farmers, according to the extension for-ester at Mass. State College.

When the foliage of house plants becomes spotted, look for overwatering or burning from direct sunlight on foliage that has not been accustomed to it.

HOBBY SHOW

January 25 — 29

One of the principal events at School this month is the hobby show which will begin on Jan. 25 and continue through January 29. It is being sponsored by the Vocational Improvement Committee and its object is to place on exhibition that which has sprung from leisure-time projects in the fields of art, crafts, and literature. Exhibits may be entered by anyone connected with the School, and must be the personal work of the contestant. Ribbon prizes will be awarded.

Paul St. Linger

HOMEMAKING DEPARTMENT ACQUIRES NEW BOOKS

Many interesting books have been added to the Homemaking library since school opened in September, 1936. The first group includes books on food topics. What housewife would not like to try making sandwiches from "1001 Sandwiches" by Florence A. Cawles? Or candy from "Candy and Candy-Making" by Mary B. Bookmeyer? This latter is a decisive aid with the many perplexing problems which arise in candy-making.

"Nutrition" by Chaney and Alborrie explains the value of nutrition to health. "The School Cafeteria" by Mary Bryan is valuable both to cafeteria managers and workers. "Your Meals and Your Money" by Gove Hambridge correlates dietary plans and food costs by summing up and applying the conclusions of recognized authorities in biological chemistry.

Among these new books may be found many pertaining to the different phases of study in home economics. "A Girl's Problems in Home Economics" by Triline, Williams, and Reeves contains the criticisms and advice given by many friends and students. "Economic Problems of the Family" by Hazel Kyrk gives a general background for more intensive work in consumption and consumer-buying. "How to Spend Money" by Ruth Brinze is a veritable mine of information for the consumer and a practical guide to buying. "Behind the Show Window" by Jeanette Eaton is the result of a research study of many commodities: where they come from and the processes which determine their costs to us. "Your Money's Worth" by Chase and Schlink is an investment which will bring returns. One day's purchases made according to this book will save enough money to pay for it, and you will have a good time for your money.

Another group includes books on fabric study. "Clothing Selection and Purchase" by Lillian Baker gives many points that should be studied by everyone interested in clothing. "Fabrics and Clothing" by MacBride and McGowan presents in an elementary way an understanding of fabrics, satisfactory buying, and interest in furnishing of the home. "Textile Fabrics" by Isabel Wingate states facts regarding textile merchandise which will guide the customer in making the best selection for his or her needs. "Real Stories of Geography Makers" by John T. Faris concerns an interesting group of explorers "who felt the call of something lost behind the ranges" and who bent every effort to find what was there.

Who wouldn't like to improve her appearance? Then read "Making the Most of Your Looks" by Dorothy Stote or "Good Taste in Dress" by Frieda McFarland, or "Dress Design and Selection" by Marguerite Hopkins.

The girls studying story-telling are fortunate in having access to that book entitled "How to Tell Stories to Children" by Sara Cone Bryant, as well as "Stories to Tell Children" by Sarah Bryant, "Mother Stories" by Maude Lindsay, "For the Story-Teller" by Carolyn Bailey, and "Educating by Story-Telling" by Katherine Cather.

Phyllis Steele

COMING EVENTS OF THE F. F. A.

- Feb. 3—General Meeting
Nominations
Annual report of Executive Committee
- Feb. 10—General Meeting
Speaker: Commander Lyons of the Coast Guard
Report of Vocational Improvement Committee
- Feb. 17—Club Meetings
- Feb. 24—General Meeting
Speaker: Representative of the New England Tel. and Tel. Sound film.
Report of Recreational and Athletic Committees.
- Mar. 3—Club Meetings
- Mar. 10—General Meeting
Sound film: "Hidden Enemies"
Report of Thrift and Public Speaking Committees.
- Mar. 17—Farmer's Day
County Service Committee will help as guides.
- Mar. 24—Club Meetings
- Mar. 31—General Meeting
Entertainment
Report of County Service and Sales and Concessions Committees.

The poultry population of Massachusetts increased 30.7 per cent between 1930 and 1935.

A warm, dry place is the right spot to store honey. It should not be kept in the cellar or any damp place, as it will absorb moisture and ferment.

The green outer leaves of Iceberg lettuce contain more than 30 times as much vitamin A as do the bleached inner leaves.

Good quality milk for fluid use may soon be available in abundant quantity on ships many days out at sea and in tropical countries where it was previously impossible to get adequate amounts of fresh milk. Several years of experimental work at the United States Bureau of Dairy Industry have led to a new method of keeping milk fresh for as long as six weeks by a simple process of concentrating and freezing.

Etaoin Shrdlu says the winter isn't so bad once you get your mind off the coal bin and try an evening of ice skating.

STUDENT PLACES FIRST AT BOSTON POULTRY SHOW

On Thursday, December 31, the School poultry team judged at the annual Boston Poultry Show. The team, consisting of Paul Day, Gilbert Freeman and Archie Buder placed fourth. In the individual judging, however, John Marshall, the alternate of the team, came through to win first place. John, who runs a commercial poultry farm, had not judged previous to this contest and deserves much praise and credit.

Paul St. Linger

Time To Disinfect Gladiolus Bulbs

Gladiolus bulbs should be disinfected at this season of the year with naphthalene flakes to control the gladiolus thrip.

Standard recommendations advise one ounce of naphthalene flakes to 100 corms, or, in other terms, approximately one cupful of naphthalene flakes to 100 corms.

Apply the flakes to the corms in a paper bag and close it tightly. Store the corms in a dry location which registers above freezing. This will definitely preserve the bulbs and keep the thrip in check.

Onions, tomatoes, young carrots, and snap beans lose less than 10 per cent as waste in preparation for cooking. Potatoes, sweet potatoes, turnips, cabbage, cauliflower, eggplant, broccoli, and squash have less than 20 per cent waste. Green corn on the cob has 75 per cent waste, while vegetables in pods, kale and spinach, all lose about half in the form of waste.

In the 1920's the average American was eating 32 pounds of citrus fruits a year. Now his yearly consumption is 48 pounds; 33 pounds of orange, 10 pounds of grapefruit, and 5 pounds of lemons.

P. W. Dempsey Alleges Irrigation Half the Battle

The Boston market gardeners, meeting here January ninth, were advised by Paul W. Dempsey of the Waltham Field Station, on the subject of irrigation.

Recommending the benefits of porous canvas or duck hose, a method of irrigation borrowed from Michigan State College where it was developed and is now extensively practiced, the speaker limited his approval with a warning against the hand labor this practice involves. The hose requires ten or fifteen-minute shifts. Its attributes lie in its ability to thoroughly water the soil without watering the foliage. Little pressure is required to force the water through the canvas pores, and the hose is easily constructed, at small expense, with a finished diameter of 2 to 3 inches.

Because it is a fact little-realized, Mr. Dempsey made special mention of the difference between one and two-inch irrigation pipes. Because of the great amount of friction in pipes, resulting in a loss of pressure, small pipes are to be advisedly avoided. The loss of pressure in a 100-foot 3-4" pipe starting at the rate of 60 pounds pressure will be 43 pounds. Under the same conditions the loss in a 1-inch pipe is 13 pounds; for a 1 1/4" pipe, 4 pounds, and so it decreases to a loss of but one pound in a two-inch pipe.

If the importance of irrigation were realized, half the gardener's battle would be won.

Dairymen Devise 1937 Plan

Members of the Essex County Dairy Committee, of which C. D. Abbott of Andover is chairman, and John Carten of Peabody is secretary, have devised a 1937 schedule directed toward benefitting the dairy industry in the county.

Of primary importance is the price problem which the committee has agreed to attack from a production standpoint.

Second in importance is the question of feeding and disease-control for which a breeding school, scheduled to open in March, was suggested as a practical solution.

Discussion of economic and accounting methods which may benefit local distributors will be undertaken by a member of the Milk Control Board.

Farm management will be investigated at meetings to be announced.

Scientific methods of handling grasses, which will include the preservation of green grass, molasses grass and silage, will be interpreted by Professor Archibald of the Massachusetts State College.

The dairymen's committee invites suggestions which will promote the welfare of their industry.

A goat owner in Plymouth county, Massachusetts, is believed to be the first man in the United States to put his herd on test under the same conditions that dairymen use in dairy herd improvement associations.

STRAWBERRIES (Continued from page 1)

Under eastern conditions plant spacing is definitely believed to offer the greatest possibility for growers to improve the yield and quality of their fruit, and thus to increase their total income.

Cultural Practices Differ Only in Midsummer

The disadvantages which spaced-row management may implicate are negligible compared with its advantages. Aside from the necessity of setting the runner plants in place (possibly once in June and four times in the following three months), this cultural practice is no different from the matted-row system. At picking time the advantages in double-hill and spaced rows are marked. Berries are not hidden by leaves. They are larger, hence picking is easier. In times of drought, during a picking season, the size of spaced plants holds up better and the season lasts longer.

Spacing the plants so that each has the best opportunity to get ample moisture and fertilizers, and restricting the runner plants so that the spaced plants are not exhausted by over-producing runners, allow for best results. Unless much larger plants are obtained in the fall, the grower cannot expect larger yields in the spring.

Garden Notes

Have you ever stopped to think what factors govern the root growth of a plant? Man requires a proper balance of food, water, exercise, and sleep to keep alive. The factors that govern root growth are: soil moisture, plant food, transplanting care, and cultural practices. Plants respond much the same way as do humans,—Folks who take good care of themselves and live right, live longer and are more content. Under normal conditions, plants with good root systems produce better yields and live longer.

By knowing some of the following facts you can better appreciate the needs of plants in order to produce better crops and make better plant growth. The drier the soil the larger the root system, while the wetter the soil the shorter the root system. The poorer the soil in plant food the larger the root system, and reversely, the richer the soil the smaller the roots.

Generally speaking, these cultural practices regulate the root system of a plant: distances of planting, intercropping, cultivation practices and thinning practices.

Have you seen large squash? At a recent meeting of Market Gardeners held at the School on January 9th, squash weighing from 38 to 49 pounds were exhibited. The last few years the Boston Market Gardeners Association have met at the Agricultural School during their winter meetings and have held a Blue Hubbard Squash Contest in connection with their meeting. This year only four squash were entered while other years there have been as many as ten or twelve entries. Mr. W. J. Munroe of Melrose took 1st prize; Mr. J. DeCarre of Wayland, 2nd; and Harold Rogers of Ward Hill, Haverhill, third.

Carleton M. Stearns

Control Oyster Shell Scale

Lime Sulphur Spray

Check up now on your deciduous plants for evidences of oyster shell scale. This condition will be noticed primarily on the purple lilac. If the bark of the plant seems to be rough, even up near the tip, covered with little oyster-shaped objects, the plant is in all probability infected with oyster shell scale.

If this condition exists at any time while the plant is dormant, a strong spray of lime sulphur should be applied. A hand spray pump will do if an orchard power sprayer is not available. This treatment will give almost complete control.

(Warning: Keep all the spray materials from houses or other buildings, particularly those which are painted white.)

Calling All Playwrights

Massachusetts playwrights herewith called!

To enter a contest.

To write a play.

It is the fourth annual contest sponsored by the State Extension Department. The play shall be in one-act form with one scene, shall portray rural or small community life, shall be submitted to the office of the Extension Service, Massachusetts State College, Amherst by March 15, and may be written by any Massachusetts resident over sixteen years of age.

Manuscripts must be typed or written on only one side of the paper. The title page shall carry the name of the play and the name and address of the author. The name of the play must also appear on the second page.

All plays entered will be available, royalty free, for production by amateur groups within the State of Massachusetts.

Awards

A playwright's conference will be conducted at the Massachusetts State College for those who submit plays.

Although prizes will not be lucrative there will be the adventure of writing the play. The three best plays will be presented in a non-competitive production at Farm and Home Week, Massachusetts State College, during the last week in July, and considered for publication by the state's leading play publisher.

Learn To Cook the Modern Way

Mrs. Mildred Snell, a graduate of Framingham Teachers' College and former teacher of Home Economics at the Lynn High School, has recently completed a course of instruction in foods preparation in Beverly, Marblehead, and Danvers.

A similar course, practical in that it may be adapted to the needs of individual groups, will be conducted throughout the county under the sponsorship of the County Extension Service. Those communities desiring Mrs. Snell's supervision are asked to communicate with Mrs. Mary M. McIntire, Home Demonstration Agent, Hathorne. Modern and economical methods are emphasized.

Food Value For Food Money

When the money to be spent for food is adequate, divide each dollar so that:

- 20c is spent for milk and cheese.
- 20c for fruit and vegetables.
- 20c for meat, fish, and eggs.
- 20c for bread and cereal.
- 20c for fats and sugars.



4 - H CLUB NEWS



Gold Medals To 4-H Gardeners

Pins Awarded to 5 and 6 Year Members

Frederick Usher of Danvers and Algerd Ramaika of Haverhill were presented well-earned gold medals at the second annual 4-H club banquet for outstanding achievements in garden club projects.

At this same banquet pins were awarded by Horace J. Shute, County Club Agent, to the following five-year members:

Beverly:
Margaret Auomando
Ruth Knight
Helen Benson
Bessie Choate
Anne Leadbeater
Mary Leadbeater
Elizabeth Carratu
Danvers:
Ruth Durkee
Groveland:
Evelyn Thurlow
Andover:
Elizabeth Eastman
Essex:
Edward Mears
To six-year members were awarded National pins:

Beverly:
Dorothy McDonough
Aubrey Boisvert
Emma De Donata
Boemna De Donata
Dorothy Treubetaris
Reta La Montague
Pauline Crersie
Barbara Scott
Bertha Rosum
Mary Knight
Jane Kessariss
Lew Ouellette
Essex:
Beulah Linehan
William Andrews
Beatrice Cleveland
Danvers:
Mildred Cann
Ruth Cann
Frederick Usher
Andover:
Gertrude Walker
Groveland:
Lovetta Knox
Amesbury:
John Kukene

Different markets call for different cranberries. Consumers in New York City prefer the smaller, dark red, sweeter cranberries. Middle western consumers like the brighter, lighter, bigger red berry best, thinking it is overripeness and not a different variety that makes a cranberry dark.

Essex Team High In State

The final vegetable-judging contest of the year, to determine the state team for vocational students, was held in Worcester, January 8. Essex County's 4-H team, whose members were Algerd Ramaika of Haverhill, Frederick Usher and Clyde Crofts of Danvers, placed highest in the contest with a score of 1480 out of a possible 1815. Algerd Ramaika was high individual scorer with a total of 525 points.

The team will be privileged, funds providing, to enter the National Contest in St. Louis in December.

Winter Training Camp For 4-H Delegates

January 29

Winter training camp delegates not only will witness some very exciting winter sports' movies on Friday evening, January 29, but have in store a dry course on skiing including the theory of fundamental turns, brakes, and stops. Saturday and Sunday, the 30th and 31st, will be devoted to outdoor skiing, stem-turns, christies, and telemarks! Should snow be deficient, the skii camp will be postponed to February 19, 20 and 21.

Suggestions for Equipment

Controlled skiing depends on the quality of shoes and bindings. If economy rules your purchases, get the best shoes and bindings you can afford, and economize on skis, poles and new clothing the first year.

Shoe specifications include steel shank, all leather construction, straight sides to soles, snug fit at ankle and heel (toes free to wiggle), box toe, groove for heel spring, large size which will accommodate three pairs of socks.

Specifications for bindings: rigid, adjustable, straight side plates, toe strap, spring attachment which will release the foot from binding under strain.

Literature For the Gardener

A reasonable winter pastime for the gardener is that of collecting a horticultural library. In its simpler form this may embrace a scrap book of pictures, clippings and articles. In a more pretentious form it will include pamphlets and bulletins and the inevitable seed catalog. And for the chosen fortunates there will be the garden books written with an eye toward specialized education.

Winter months spent in study will mean future days of encircling beauty.

ESSEX FARMER AND HOME MAKER

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VOL. 18

LATHORNE, MASS., FEBRUARY, 1937

NO. 2

Harry Piper Epitomizes Dairy Trial

Predicts Favorable Future

After twenty years of working at cross purposes the major co-operative dairy organizations which sell milk in Boston have united in a common program. This should have a beneficial effect on dairy conditions in Essex County and do away with the spectre of a complete collapse of prices in Boston, followed by reduction in secondary markets.

At the present writing, February 9, wholesale prices of milk in Boston are in a chaotic condition and without some new force appearing to bring about stabilization, retail milk prices will inevitably go down. The price established by the Massachusetts Milk Control Board is 6 1-4 cents to the farmer but large quantities of milk are being offered for sale at 5 1-4 cents, due to the head-on collision between New England Dairies and the Horn and Whiting Companies.

The new force has actually appeared and will within a short time show its possibilities in building up, instead of tearing down, prices. It is called MILK, Inc., a Vermont corporation which will serve as a central sales agency for the co-operatives. New England Dairies, Milton Co-operative, United Farmers, and Cabot Co-operative have already signed up as members of the new organization and pledged their support to it. This means that instead of fighting one another these major co-operatives will all work for a common program.

The immediate aim is to develop this central sales agency to a point where it can establish prices in the Boston market on a basis which will give to each farmer in all of these organizations and other farmers who may ally themselves with the new organization, his fair share of the sales in the Boston market. This will do, by voluntary agreement what the Federal license and Order was supposed to have done. If properly supported by farmers it will be effective where the Federal control failed.

The program now calls for the setting of a new price for Boston at an early date. It is proposed to name a seven-cent price, in place of the present 6 1-4. All the co-operatives and all dealers who fall in line with this new stabilization of the Boston price should immediately strengthen prices in nearby Essex County Markets.

In 1935 the average cash income per American farm was reported to be more than \$1,000.

Dr. Donald Wyman and Eleanor Hughes Main Speakers on Farmers' and Homemakers' Day, Wednesday, March 17, 1937

Dr. Wyman On Morning Program

Annually, for twenty-three years, farmers and homemakers of Essex County have met, on the second Wednesday in March, in a large assembly at this School.

It is a special privilege of the School to be permitted to act as host to those people whose interests are its own interests. This year's program, which will occur on Wednesday, March 17, has been designed to entertain, as well as to solve current problems arising in the field of agriculture.

The morning program will open with an illustrated lecture by Dr. Donald Wyman of the Arnold Arboretum. Little need be said in praise of this treat. Both Dr. Wyman and the Arboretum speak for themselves.

D. A. Spencer of Littleton, rodent control specialist for the United States Department of Agriculture, will also speak at the morning assembly.

Section meetings are scheduled, as has been the custom, for the afternoon program. Opportunities for roundtable discussions will arise.

Market Gardeners

At 1.30, market gardeners will meet to hear Sumner Park of the Massachusetts State College, D. A. Spencer, and Professor G. B. Snyder.

Poultrymen

Poultrymen's interest will be centered in the afternoon around a baby chick show sponsored by the County Association.

Fruit Growers

W. H. Thies, of the State Extension Department, will present the 1937 outlook for fruit men. Sumner Parker and D. A. Spencer will supplement Professor Thies' predictions with discussions on fruit practices.

Dairymen

Dairymen will learn new facts about forage crops from R. W. Donaldson of the Massachusetts State College.

Gardeners

Professor Ray M. Koon of the Waltham Field Station and Henry S. Clapp of the University of New Hampshire will discuss home gardening and floriculture.



Elinor Hughes, Dramatic Critic, Boston Herald

All homemakers, in fact all women, should be interested in this year's program arranged by the Homemaking and Extension departments of the School.

Miss Elinor Hughes, whose dramatics column is a daily feature of the Boston Herald, will speak at 2.30 in the assembly hall of the homemaking building, on moving pictures and drama.

At 1.30, Miss Gladys Winegar, representative of the Textile Education Bureau, New York City, will present a demonstration and style show, featuring fashions for the family.

It sounds exciting, doesn't it?

Whitewash can be made to stick to walls if an ounce of alum is added to each gallon. One pint of sugar solution to five gallons of white wash will help it penetrate wood or plaster.

Essex Farmer and Homemaker

HATHORNE, MASS.

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Association
Secretary, R. H. Campbell Topsfield

Calendar

- March 1—8. Week's holiday for the
students of the homemaking depart-
ment.
March 1. Agricultural conservation
program, City Hall, Gloucester. 8
P. M.
March 2. Dairy meeting at this
School, 10.30 A. M. Farmers invit-
ed.
March 2. Fruit meeting at this
school at 8 P. M.
March 3. Essex County Goat Breed-
ers' banquet, homemaking building
of the School. 6 P. M.
March 4. Livestock breeders' meet-
ing at this School. 10 A. M.
March 12. Junior Prom
March 17. Farmers' and Homema-
kers' Day.
March 31. Athletic banquet and

1937 Crop Loans Available

1937 Crop loans are now available
under a bill recently passed by Con-
gress. The bill provides loans up to
\$400 upon the approval of the county
committees.

Loans are made for the purpose of
aiding farmers to buy seed, fertilizer,
feeds, and fuel for machinery.

Application may be made through
County Agent F. C. Smith.

Homemaking Department

Book Chat

With so many new books forth-
coming I'm sure you've picked and
chosen some to while away these short
dull days and long evenings. Did you
include "Seven Pillars of Wisdom" by
T. E. Lawrence or "The Last Puritan"
by George Santayana? On the shelf
beside Mrs. Hillis' "Live Alone and
Like It" you should find "Enjoyment
of Laughter" by Max Eastman. If
you care for pastoral scenes "We
Found a Farm" by Charles Speare or
"The Home Place" by Dorothy Thom-
as should prove interesting, the lat-
ter picturing disillusioned children re-
turning to the farm.

"Oscar Wilde Discovers America"
by Lloyd Lewis and Henry Smith cer-
tainly includes many exciting details
that a history on the average biograp-
hy would omit. "Schooldays with
Kipling" by G. C. Beresford offers en-
tertaining biographical reading, as
does "Green Laurels", a book of great
naturalists, by Donald Peattie.

If you select books to carry your
imagination to far places try "Gaspe,
the Romantic" by Olive Smith, "Zig-
zagging the South Seas" by Isabel
Anderson, or "Arctic Adventure" by
Peter Frendsen.

Before you complete your list of
contemplated reading be sure you've
included "The Diary of Selma Lager-
lof", "Sunrise to Evening Star" by
Marina King (life in South Africa)
and "Young Love" by John Erskine,
a group of short stories.

Verna L. Clarke
Division Head, Academic Dept.

Prevent That Cold

This is the time of year when all
of us are hoping that we will not
catch the cold which we see so fre-
quently about us. Is there any way of
withstanding this plague?

"Watch your diet" is a good motto
at this time.

This means, of course, to eat a well-
balanced and sufficient diet with a very
plentiful supply of the so-called "pro-
tective foods." A goodly amount of
fruits, vegetables, and milk is neces-
sary to give us protection. Perhaps
you feel that it is difficult to get an
inexpensive supply of these foods at
this time but there are plenty avail-
able if we will only use them. This
is the best time of year for citrus
fruits. Use oranges and grapefruit
not only as breakfast fruit but in other
ways, and do it often. Don't forget
that from six to eight glasses of
water a day is an excellent health
habit and a good cold precaution.

We hear much of the connection
between Vitamin A and infections of
the mucus membrane. This vitamin
is of especially vital importance be-
cause of its protective action along
this line. Of course cod liver oil and
haliver oil are excellent sources of this

Students Pursue Hobbies In Leisure Time

That young men and women stud-
ents enrolled in vocational agriculture
have "hobbies" was demonstrated at
the recent exhibit of Arts and Crafts
held at this school during the last
week of January. Three distinct
classes: arts, crafts, and literature, to-
gether with an unclassified group open
to all students in the Agricultural
Department stimulated much interest
and resulted in a unique display in
the main library of the school.

Twenty-five students set up exhibits
covering model boats, airplanes, pas-
tel drawings, pencil and crayon
sketches, photography, leather and
metal crafts, archery, taxidermy,
coins, stamps, and rare books.

An exhibit of hand-carved wooden
models consisting of a prairie wagon,
two full-rigged schooners, a jin-rick-
shaw, a norseman's boat, and a lamp
stand, the work of Sidney Batchelder,
a graduate of the school, drew praise
from all who viewed the displays.

The exhibition of arts and crafts
was sponsored by the vocational im-
provement committee of the Essex
Chapter of Future Farmers of Amer-
ica as a part of their program to
increase the home as well as the vo-
cational interests of its members.

More than thirty exhibits were jud-
ged by a committee of staff members,
with the following results:

Sweepstakes Winners

First: Walter Hichens of Middleton
Second: Leroy MacAloney, Groveland
Third: Roger Coleman of Beverly

Arts

First: Barbara Jewett, Beverly
Second: Henry Smith, Saugus
Third: Edwin Wentworth, Lynn

Crafts

First: Newton Henriksen, Lawrence
Second: Anthony DiLiso, Swampscott
Third: Russell Burkhardt, Methuen
Honorable Mention:

Clarence Mitchell, Hamilton

"anti-cold vitamin" as well as the
valuable "D Vitamin" which strength-
ens bones and teeth. We cannot ex-
pect the fish oils to cure our colds
but they will undoubtedly increase
our resistance to them.

Vitamin A may be found in foods
as well as in well-known oils. Milk,
butter, and cream are excellent sources
as are also colored vegetables. In
fact, the more color in a vegetable the
more Vitamin A. Those which are
now available and which we should
use plentifully are squash, yellow
turnip, carrots, broccoli, chicory, let-
tuce and spinach.

Let's be sure our families are get-
ting extra supplies of Vitamin A, and
let's beat this cold germ by the best
method "a good Diet."

R. E. Emerson
Foods Department

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

FEBRUARY, 1937

STUDENT EDITORS

Homemaking Department

Louise Spofford, Danvers
Elizabeth Pyburn, Peabody
Elizabeth Colby, Newbury
Phyllis Steele, Middleton, Senior

Agricultural Department

Leonard Duratti, Swampscott Junior
James Keane, Nahant Senior
Norbert White, Lynn Senior
Paul St. Linger, Beverly Senior

FARMERS' AND

HOMEMAKERS' DAY

For Farmers' and Homemakers' Day, on March 17, the Homemaking Department is preparing numerous exhibits which will be on display in the classrooms.

Clothing

The clothing department will exhibit garments made by the students.

The Freshman class has made children's dresses trimmed with bias tape and embroidered collars.

The Junior classes will exhibit wool skirts and both cotton and silk blouses, smocked and trimmed with bias tape.

The Seniors and High School Specials have completed wool and silk dresses, the latter in spring styles featuring froes, rows of covered buttons, loops, sraghetti flowers, puffed sleeves and V-necks.

Foods

A modern tea table, displayed in the main dining room, will interest many.

The Juniors will display a large and tempting assortment of pop corn which will include chocolate-covered and caramelized corn.

Miss Lovett will exhibit, in poster form, the relationship between science and food preservation.

Child Care

The Seniors and High School Specials plan to exhibit posters and notebooks disclosing the work completed by them during the first semester. Children attending the Farmers' Day program will be cared for by the girls in this division.

Academic

The Juniors and Seniors will have on exhibition sketches illustrating Irving's "Sketch Book" and Nathaniel Hawthorne's "House of the Seven Gables," as well as newspaper clippings on current events.

Home Decoration

In the home decoration department there will be a novel window decorated by the Seniors and High School Specials. Notebooks and handicraft articles made by the students will also be on display.

P. S.

HONOR ROLL

Homemaking Department

Freshman Class

Methuen
Ada Marsland
Grace Raimy
Edith Sharp

Lynn
Edith Skidmore

Junior Class

Methuen
Marcelle Berwick
Edith Moody

Beverly
Olive Caverly
Lawrence
Charlotte Finn

Middleton

Elinor Hoelzel
No. Andover
Mary Lafond

Saugus

Katherine McLaughlin

Salem

Grace Taylor
Ipswich
Ellen Willis

Senior Class

Methuen
Lemyra Briggs

Lynn

Barbara Clark
Byfield
Winifred McKay

Lawrence

Yolanda Scamperino
Lena Tela

High School Specials

Danvers

Ruth Cann
Barbara Sturtevant

Beverly

Priscilla Hopkins
Irene Snell

Ipswich

Louise Minichello

Rockport

Helen O'Hearn

Topsfield

Ruth Tronerud

E. C.

A HOME ECONOMICS TRIP

Home Economics training is carried on over most of the world. This was shown by an imaginary trip taken by some of our girls who related, at a recent meeting of the Echo Club, the home economic phases of each country they visited. The President, Helen Lucas, opened the meeting and transferred the charge of the entertainment to Yolanda Scamperino who directed the trip.

The first stop was at Norway. Betty Colby told about the girls in this country and Sweden. Swedish girls' studies are very similar to those of Americans but in Norway the girls live in their schools. Cookery predominates in all these schools.

England was next visited. Here the people do not have a very nutritive diet, mostly starch, as explained by Yolanda Scamperino, to show the need of home economics.

Barbara Clark next explained the procedure by which the girls of Denmark receive their training. They start their training in the grade schools.

Winifred McKay told about the French. France does not have a great deal of home economics. Evening classes have been started there which are helping these people along these lines. In Belgium, as in France, much of the homemaking is taught in the grade schools.

Austria and Germany were the next stops. Betty Hawkes described the importance of child care training in Austria. In Germany the teachers are very well trained. Students are taught to be thrifty and skilled in sewing.

The demand for teachers in Poland is great. Frances Carty told how the teachers travelled from one place to another and stayed at one place for a period of from six to eight weeks.

Anna Gioico told how the girls of Italy are urged to marry and taught gymnastics in order to become physically fit.

In Alaska where some families were given pieces of land by the United States government, the children are given their homemaking training in their own homes. Kay McLaughlin talked about Alaska and the Matanuska colony.

Marcelle Berwick related the training given to the girls at Helena, Montana. The girls there go to school not in a building as one would imagine but in freight cars. They expect soon to have a rebuilt high school.

The trip ended with the audience singing the school song.

E.P.

Joseph Finocchio, '28, is working for the Salem Sign Company.

Eunice Freiwald, '29, would like to hear from some of her old friends. The address is 244 Walnut Ave., Bogota, New Jersey.

Evelyn Richards, '30, is assistant dietitian at Philadelphia City Hospital.

ALUMNI NOTES

Irene Burbeck, class of '34, is training in the Addison Gilbert Hospital, Gloucester.

Cecile Lafond, '32, is employed in the Pacific Print Workers Co. as Penographer.

Dorothy Thorne, class of '35, is working as companion in Swampscott.

Ruth Morse, class of '34, was married on October 26, 1935 to Phillip Roulo. Their residence is in Auburn, Maine.

Dorothy Woodman is employed in the National Shawmut Bank in Boston. She is of the class of 1935.

Lillian Ogden, class of 1933, who was married to Marshall Paine, November 12, 1935, has a baby boy.

Claire Moran, '36, is working in the Fannie Farmer Candy Shop in Salem.

Mr. and Mrs. Belmont Perkins have a daughter, Barbara Lee, born February 1. Mrs. Perkins is the former Betty Cole, class of '35.

E. C.

Carl D. Phipps, '21, Central St., Berlin, Mass., is working at the Chedco Farms.

Harold Hanson, '22, 14 Giles Ave., Beverly, is married and the father of five children. Harold is manager of the Porter Farm Milk Company.

R. Burleigh Odiorne, '23, Boutwell St., Wilmington, is the new president of the Alumni Association.

Chester Hansen, '24, is with the Industrial Bankers. He is married and resides at 63 Baker Ave., Lexington.

Clifford Sewall, '27, 78 Cleveland Ave., Saugus, is employed in the Lynn H. P. Hood Plant.

Miriam C. Stone, 1926, is now Mrs. Bennett of 17 Argilla Rd., Ipswich.

Freda Peterson, '36, is convalescing from a recent operation at her home in Newbury. L.D.

SPRING STYLES

Styles for this spring are most colorful and attractive. One of the most popular styles is the silk shirt waist dress for daytime wear. It is made of attractive silk print on a pastel background.

Not only are daytime dresses attractive to the eye but also the smart afternoon gowns. They are featuring V-necks, short puffed sleeves and flared skirts which tend to have fullness in the back. Afternoon dresses are street length and lace is very popular for the matron, lending itself very well to the style features mentioned above.

Suits for the spring of 1937 have very smart, tailored lines. Navy blue, browns, and beige seem to be the predominating colors. The skirts are very simple having several pleats. Instead of slit skirts pleats are used for action in a sports and swagger skirt. The suit coats this year do not lap over but merely meet and are held together by two buttons on a cord, giving the suit a very smart effect.

L. S.

HONOR ROLL

Agricultural Department

Methuen

Walter Winn, Clifford Nelson, Donald Nelson, Warren Nelson, Russell Weinhold, Myron Eastwood.

Marblehead

Albert Greenaway
Clayton Teague

Middleton

Walter Hichens
James Philip Webber

Salem

Warren Kneeland
John Fay
Walter Tataronis

Haverhill

Levon Amirian
Rhea Gosselin
Walter Stacey

Rockport

Jacob Ranta
Percy Curtis
John Balzarini

Gloucester

Joseph Arnold

Peabody

John Fullington
Allyn Trask

Beverly

Donald Gasper, Paul St. Linger, Gildo Santin, Gilbert Freeman, Robert Corneliussen, Raymond Kennedy, Peer Johnson, Howard Wilson, Alden Crosby, Leavitt Moulton.

Lynn

Merle Graffam, James O'Neill, Sidney Johnston, Gary Sano, Edwin Wentworth, Francis O'Connor, George Georgantis.

Andover

Albert Batchelder
Norman Peatman
Conrad Nollet

Swampscott

Leonard Duratti
Nicholas DiLisio
Joseph Mattera

No. Andover

Henry Smolak
Theodore Smolak

Essex

David Elwell
David Foss

Lawrence

Francis Gillen
Augustine Sheehy

Danvers

John Ylitalo
Aubert Giles
Robert Spencer

So. Hamilton

Karl Beal

Amesbury

John Kukene

Topsfield

Paul Parker

Saugus

Henry Smith
Willis Lord

THE ESSEX AGGIE FOOD SHOP

Every Wednesday afternoon the senior foods specials open the Essex Aggie Food Shop. It is a busy place and delicious odors begin to pervade the building as the girls fill the many orders which have been sent in.

Many professional looking cakes are made with a variety of frostings. Several kinds of cookies are also prepared, including filled, fruit, and fudge favorites.

Orders for food are received on Tuesday afternoon, and include the above-mentioned cookies and cakes, plain or fancy, with or without icings. After the cakes and cookies are made and frosted they are carefully packed and ready for the customer at 3.25 P. M.

The food shop has been open for three weeks and the food specials are doing very well. It is very good practice for those girls who may later do something in the foods line.

Yolanda Scamperino

WRESTLING

On January 29, an inexperienced Aggie team met defeat at the hands of the powerful Haverhill High squad (21-3). All victories were on "time advantages" indicating that most of the matches were closely contested. Chester Clinch scored three points for the Aggie by defeating his man.

Other members of the squad were: Archie Nimmo, Merle Graffam, David Luce, George Foster, Walter Mansfield, John Marshall, and Manager Augustine Sheehy. P. St. L.

FRESHMAN BASKETBALL

The Freshmen basketball league, recently organized, are playing off their series. Final scores will be printed at the end of the season.

Team A is captained by Warren Nelson, and includes: Thomas Fullerton, William Whiteside, William Lane, Russell Weinhold, and Clarence Mitchell.

William Tennyson is captain of Team B. The following boys play with him: Lloyd Briscoe, Francis Rogers, Richard Sturtevant, Charles Currier, and James Barnes.

Captain Andrew Satama of Team C has the following line-up: Albert Lee, Charles Fowler, Richard Mulally, Joseph Kearney, Raymond Perkins, Wesley Searles, James Mathos. P. St. L.

JUNIOR CLASS ELECTS OFFICERS

At the Junior class elections the following officers were appointed:

President, William Corning
Vice-president, Esther Boyle
Treasurer, Jacob Ranta
Secretary, Charlotte Finn
Executive Committee, Sidney Johnston

Allyn Trask
The class will meet soon to discuss such matters as the dance, dues, and the budget. Mar. 12 has been set as a tentative date for the dance.

L.D.

1937 Soil Conservation

1937 CROP LOANS IN PROSPECT

Act Focused On Soil Building

Meetings are being held in the County communities at which the essential features of the 1937 Soil Conservation Act are being explained.

Total Payment

will be made this year for soil-building practices.

Farmers interested in computing their allowance are asked to communicate with the County Agent F. C. Smith, Hathorne. The amount one farm may receive is computed on the basis of total crop acres. (Poultrymen and part time farmers with small acreage are eligible this year, the minimum farm allowance being \$20.)

Methods of earning farm allowance by means of performing soil-building practices, include:

1. the use of lime
2. topdressing of soil in hay lands and pastures
3. treating stable-manure with superphosphate
4. seeding down legumes
5. ploughing under green manures
6. treating cranberry bogs with sand
7. transplanting nursery trees in pasture
8. thinning woodlands
9. mulching and fertilizing orchards
10. preparing a conservation map and plan of the farm

No farmer in the county who desires, should be left out of this Act.

In Prospect

March 1

Outstanding features of the 1937 Soil Conservation Act will be discussed at the Gloucester City Hall, at 8 P. M. All farmers interested are invited to attend.

March 2

At 10.30 in the morning, Professor Ellsworth Bell, marketing specialist of the Massachusetts State College, will show film strips to this School depicting the cost of production in the dairy business, for the benefit of dairymen and producers alike.

March 2

"Shaping and pruning a tree" will be described by Professor W. H. Thies, fruit specialist of the Massachusetts State College, at 8 P. M., at this School.

March 4

Livestock breeders will hold an all-day meeting (from 10 A. M.) at this School, to study recent genetics' discoveries. V. A. Rice, head of the animal husbandry department at the State College, and C. J. Fawcett, Extension Specialist, will be the main speakers.

March 4

The Essex County Goat Breeders' Association will be hosts to the goat breeders of Massachusetts at a banquet in the homemaking building of this School. V. A. Rice will be the principal speaker.

Garden Notes

The life of plants is regulated by the supply of water present. If plants do not have all the water that is needed in the soil, their cells do not function properly. The more succulent a plant, the greater amount of water is present in the cells. Lettuce plants contain 85 percent water, while tomato fruits contain 90 percent.

It is important to remember that plants receive their food only in solution, or, expressed in a different way, all organic food is presented to the cells of plants in water absorbed through the plants' root hairs.

Many factors affect the transpiration of water through the leaves of a plant.

1. Light—The stronger or brighter the light the greater the loss of water.
2. Temperature—The higher the temperature, the more transpiration.
3. Humidity—The higher the humidity, the less transpiration;
4. Wind—Hot dry winds increase transpiration;
5. Water content of soil—the higher the water content, usually the more water is transpired;
6. Chemicals—Poor soil tends to decrease transpiration;
7. Spray—Spraying plants with Bordeaux Mixture during dry weather increases transpiration.

There are three important factors that modify the water requirements of plants:

1. Environment—air, humidity, temperature.
2. Soil fertility.
3. Cultural practices.

C. M. Stearns

Future Orators

The public speaking contest sponsored annually by the Future Farmers of America has come around again, the preliminary school contest being scheduled for March 3.

The following students will participate: Charles Mahoney of Lawrence; Carroll Killillae, Nahant; Richard Paulsen, Lynn; Rhea Gosselin, Haverhill; Walter Stacy, Haverhill; Aubert Giles, Danvers; Russell Weinhold, Methuen; Norbert White, Ipswich.

Two winners of the school contest, and an alternate will compete in the district contest, March 10, at the Norfolk County Agricultural School, and on March 24 two winners and an alternate will go to Hatfield for the State contest.

Four Ways To Make Poultry Pay

A survey of Massachusetts and Connecticut poultry farms has indicated that too many plants are operating at a point below best labor efficiency. Increased conveniences, easier feeding practices (through improved feeds), and a decreased spread between feed costs and egg prices have made it necessary to improve labor efficiency to the point where on a modern plant one man cares for 1200 layers and 3000 chicks.

The distribution of hatching dates over a wider span of months in order to get eggs in late summer and fall is being more widely followed. Furthermore, poultrymen are beginning to learn that pullets laying at too early an age lay small eggs for a much longer period in the fall and winter than those taking six to seven months to mature. With a wide range in price between large and small eggs at this season, the production of large eggs is very important. Birds coming in with large egg-size rapidly yield greater dividends than the small-egg birds. Furthermore, these birds seem to maintain production and live longer than their precocious sisters.

The use of brooder houses and laying shelters to carry old birds beyond the time for housing pullets is also recognized as profitable from the standpoint of large and high-priced eggs.

The only way the poultryman can know how well his birds are living and extending their laying period into the second fall of production is by keeping careful records and accounts of his flock count and egg production through the months of the year, by making comparisons from year to year, and finally by adjusting his hatching dates to take up the slack during those months when demand is high and production low.

J. Stanley Bennett
Instructor in Poultry Practices

FARM and HOME BROADCASTS

Mondays thru Fridays
6.15 A. M. 1.30 P. M.

"New England Agriculture"
WBZ

Monday, Wednesday, and Friday
"Farm and Home Reporter"

WAAB	Boston
WHDH	Boston
WROL	Boston

ORDER SEEDS EARLY

Seed catalogs are raining in. In alluring pictures and brilliant descriptions they portray the novelties of 1937. Added to these, there are the good old stand-bys.

Wouldn't it be feasible to order seeds now so that when planting time comes we shall have what we want and not be disappointed because of late ordering?

Incidentally, planting time is likely to get here relatively early this year.

Foods Classes Popular

Miss Mildred Snell, of the County Extension Service, is conducting her very popular course in foods preparation throughout the county. Classes have been meeting on Thursday afternoons at Hobbs Memorial Hall in Clifton, and will continue through April. Enrolled in the course, are: Mrs. Mary Carruth, Mrs. Delia Conroy, Mrs. Anna Findlay, Mrs. Lorraine Hartz, Mrs. Annabell Faulkner, Mrs. Ethel Leary, Mrs. Lillian McManus, Mrs. Adel Moniz, Mrs. Lillian Norton, Mrs. Viola Parker, Mrs. Ida Raisbeck, Mrs. Dorothy Rich, Mrs. Dorothy Schofield, Mrs. Mary Wilson, Mrs. Katherine Kane, and Mrs. Mildred Jorgenson.

Middleton Group

A class of seventeen, from Middleton, will meet in the homemaking building of the Agricultural School on Tuesday evenings, starting March 9. This group includes: Mrs. Elva Adams, Mrs. Hazel Anderson, Mrs. Alice Cass, Mrs. Emily Davis, Mrs. Eleanor Duclon, Mrs. Ellen Ogden, Mrs. Margaret Peterson, Mrs. Poor, Mrs. Marjorie Richardson, Miss Laura Roberts, Mrs. Elmer Rogers, Mrs. Louis Rogers, Mrs. Charles Seaman, Mrs. M. T. Silvernail, Mrs. R. W. Silvernail, Mrs. Maurice Tyler, and Mrs. Charles Zebell.

Lawrence

Mrs. Marion Costello of Lawrence has organized still another class which will meet on Monday evenings, beginning March 8, in the foods laboratory of the Lawrence High school.

Round About the County

Mrs. Mary M. McIntire, Home Demonstration Agent, announces that classes in clothing and upholstery will be formed in those communities desiring them. One group, in Salem, has started spring cottons, under the tutelage of Mrs. McIntire. Organized by Miss Ruth Remon, the class includes: Mrs. Elizabeth Walch, Mrs. Ruth Elwell, Mrs. Grace Lutts, Mrs. Helen Leslie, Mrs. Ralph Leavitt, Mrs. James Garrity, Mrs. Karl Wendell, Mrs. Alvin Billings, Mrs. Harold Wheeler, Mrs. R. J. Preston, and Mrs. F. S. Martin.

Bargains In Bath Towels

Towels offered as "specials" or bargains are usually so classed for one or two reasons. They may be cut shorter or woven narrower than the usual measurements in order to sell at a lower price. They may be the customary sizes but lighter in weight. They may be seconds, that is, imperfect in some respect. Or the merchant may have been able to purchase the stock at a reduced price, by taking

County Food Contest

May 22nd has been set as the date for the annual 4-H county food contest. It will allow for judging and exhibits. Juniors will judge table setting, identification of equipment, and one class of plain muffins. Their exhibits will be quick breads (muffins, gingerbread or corn bread.)

Senior members will judge packed school lunches, canned vegetables or fruits, baked plain cake, b'scuits or cookies, vegetables for selection, and menus. Their exhibits will include a baked product, a 4-H notebook, table-setting (including centerpiece) and a well kept record of the work done in foods projects.

Three contestants will be selected to represent Essex County in the State Contest.

State-wide Poster Contest

Here, a 4-H members, is a chance to test your initiative and originality.

On June 5th, at the Farley club house in Amherst, posters submitted by 4-H members throughout the state will be judged for general appearance, originality, and the lessons they teach. The county contest will end May 22nd.

The subject of the posters must be on some phase of the motto "Stand Up to Life."

The size may be 12" x 18" or larger.

Free-hand drawing, cut-out pictures, or a combination of both may be employed in the execution of posters.

For details, write your county club agents.

News Flashes

The second annual 4-H tent caterpillar campaign starts March 15 and continues to April 15. The campaign will be broadcast by Mr. Leland over station WBZA on March 6.

Recreation Conference

The camping section of the recreation conference will be held on Saturday, March 13. Dr. L. K. Hall of Springfield will discuss the history and philosophy of camping. Miss Emilia Thorsell of the National Girl Scout Office, will talk on educational trends in camping.

Music Appreciation Contest

Funds providing, the 4-H Music Appreciation program will be broadcast beginning Saturday, April 3. The music memory test will be held on Saturday, June 12.

National Camp Dates

Notice has been received that the 1937 National 4-H Club Camp will be held in Washington, D. C. during the period June 17-23, inclusive.

the entire output of a small mill or some such reason, and may be passing on some of the savings to his customers.

When buying bath towels it is well to remember they shrink considerably in laundering.

4-H Club Members

Where They Are

Silas Little of Newbury, who studied at Massachusetts State College and graduated from Yale Forestry School, is now research expert for the control of long-leaf pine burning at Aicigoney Forestry Experiment Station, New London, N. J.

Jua Little is in the marine service at Quantico, Virginia.

Helen Walker of North Andover is a Junior at Framingham State Teachers' College.

Nancy Ordway is teaching in the South Groveland Grade school.

Winifred McKay of Byfield is completing her Senior year at the Essex County Agricultural School.

Richard Clayton, Saugus, is studying at the Stockbridge School of Agriculture.

Charlotte Semple, a graduate of Nassau Institute, Maine, is employed by the Gas and Electric Company in Gloucester.

Beulah Linehan of Essex is a freshman at Jackson College.

Esther Usher of Danvers will complete her Junior year at Simmons this spring.

Mildred Cann, graduate of the Salem Teachers' College, is teaching in Danvers.

Ruth Cann of Danvers is enrolled in the homemaking department of the Essex County Agricultural School.

Cut Your Timber And Have It Too

Cutting your timber and having it too is possible through careful harvesting of wood products, which allows growth to balance cutting.

The explanation for the poor quality of many woodlots may be traced to the continuous removal of the best trees. Over a period of years if only the highest grade trees are cut, the remaining stand will consist largely of inferior kinds.

Another practice that should not be allowed is turning the animals into the farm woods. They tramp down, root up, and eat the young seedlings needed to produce forests of the future. Their sharp hoofs may bruise exposed roots, admitting fungus diseases which can cause decay of the tree.

The 1937 agricultural conservation program recognizes the importance of farm woodlots and offers assistance for carrying out sound forestry practices. Woodlot owners should acquaint themselves with the act in order to take advantage of this opportunity to put their stands into shape for profitable timber production.

Italy is fostering wide spread rural electrification in order to improve the standard of living in rural areas so that people will leave the crowded cities and return to the land.

ESSEX FARMER AND HOME MAKER

Published Monthly by the Essex County Agricultural School

VOL. 18

HATHORNE, MASS., MARCH, 1937

NO. 3

Norbert White of This School Places First in Speaking Contest

Milch Goats, His Subject

Once again Essex is victorious in a closely contested public speaking contest and we congratulate Norbert White of the Senior Class for winning first place in the County School Contest with a talk on "The Dairy Goat."

Student White placed second in the school elimination contest but was given first place by judges of the County School Contest held at the Norfolk County Agricultural School on Wednesday, March 10. Roland Cullenberg of Bristol placed second with an excellent speech on soil conservation. Albert Simoni, Jr. of Norfolk placed third, taking "Juliet's Preference" ("a rose by any other name . . .") for his subject. Charles Mahoney of Essex placed fourth with a speech on roadside stands and is the first alternate for the state contest from the county school district.

On March 19, Norbert White again won first place, in the State Contest. His winning speech was based on his knowledge of and experience with milch goats at this School, and on the Bennett farm in Ipswich where he has become proficient in their care, feeding, and housing.

Student White is active in the Future Farmers of America, being president of the Essex Chapter and serving on the executive committee. Because of age limitations he will not be eligible to compete in the next stage of the F. F. A. national contest.

The cranberry which is native to the northeastern United States was first cultivated at North Dennis, Massachusetts, between 1810 and 1820; but it was not until about 1850 that enough experience was accumulated to grow this crop commercially.

ESSEX COUNTY'S OFFICERS IN STATE CHAPTER OF F. F. A.

Secretary: Gilbert Freeman, Beverly
Reporter: Norbert White, Ipswich
Executive Committee Member: William Corning, Beverly

1000 Attend 23rd Annual Farmers' and Homemakers' Day

D. A. Spencer Recommends Red Squill For Rat Eradication

More than a thousand farmers of the county and state, with their wives, swarmed to the school March 17, for the 23rd annual Farmers' and Homemakers' Day.

The program, carefully planned and executed, will go down as a memorable one. The departmental exhibits, instructive and graphic, ranged from processes of "posting" birds and eradicating blights and pests, to the care and feeding of milch goats. The homemaking department of the school exhibited nearly 57 varieties of pop corn balls along with a large-sized assortment of cream puffs. Clothing, home decoration, home nursing, related sciences, and academic attainments of the students were on display.

Dr. Donald Wyman's colored photographs of the flowering shrubs and trees of the Arnold Arboretum far surpassed the unnatural and stereotyped quality of "slides" too frequently shown.

Donald Spencer of the U. S. Department of Agriculture, lecturing on the extermination of rats, asserted that red squill (a powder ground from a bulb grown on the banks of the Mediterranean) is the safest and most effective poison to rid homes and barns of rodents.

Mr. Spencer told fruit men that in

New England practically all tree girdling is done by the meadow mouse; other mice are not harmful to fruit trees. Fruit growers learned from Professor W. H. Thies that it takes eleven inches of water (rain-fall) to produce a three-hundred bushel crop of apples.

And from Sumner Parker, State Extension worker, fruit men discerned that orchard mulching is included in the farm practices which fruit growers are following in order to receive recompense from the Government.

The hardy asters pictured in color by Ray M. Koon of the Waltham Field Station, aroused considerable and favorable comment. The colorings are richer than ever before.

Fashion futures for the family, demonstrated by Miss Gladys Winegar, director of the Textiles Education Bureau, New York City, pointed to a fast-color, unwrinkled season!

Miss Elinor Hughes, critic and columnist for the Boston Herald entertained her audience of four hundred women with intimate stories of Hollywood and the drama.

A spring flower show, sponsored by the Floriculture Club of the Future Farmers of America, drew many interested spectators to the school's greenhouses.

William Bushby Has A Word For Mass. Poultry

Of interest in the 1936 "Who's Who" of the Massachusetts Federated Poultry Associations, was an article written by William T. Bushby, former student of this School, and winner of the Baby Chick Growing Contest sponsored by the State Association. It is Mr. Bushby's contention that it pays to buy Massachusetts

WILLIAM BUSHBY
(Continued on page 3, col. 3)

Bumper Caterpillar Crop Predicted

Tent caterpillars may again be abundant in 1937, and Essex County should watch for them when the leaves of wild cherry, apple, and birch first appear.

The outbreak of these insects, which began several years ago, shows no definite signs of waning. Each year may bring subsistence of the epidemic, but repeated annual spring defoliations weaken trees and make

CATERPILLAR
(Continued on page 3, col. 2)

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

A MONTHLY PUBLICATION
SUBSCRIPTION 25c PER YEAR

Persons desiring this publication should
address the Essex County Agricultural School,
Hathorne, Mass.
Entered as second-class matter, May 28,
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under the Act of August 24, 1912.

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Essex County Poultry Association
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Association
Secretary, Fred N. Phillips Marblehead
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Eastern Massachusetts Society
of Beekeepers
Secretary, E. S. Batchelder Cliftondale
Essex County Milk Goat Breeders'
Association
Secretary, R. H. Campbell Topsfield

Calendar

March 31—Athletic Banquet and
Dance, at this School.
April 1—Essex Pomona Grange
Meeting, West Newbury. Program
provided by students of
this School.
April 10—4-H Club handicraft
contest at the School.
April 30—Spring vacation, home-
making department.
April 30—Project season begins
for agricultural students. All
class work suspended.

Alumna of This School, Air Hostess

Thelma Healy '33 With
American Airlines

Miss Thelma Healey, daughter of
Mr. and Mrs. Daniel S. Healey of
Lynn, and a graduate of the Home-
making Department of this School,
after passing examinations with the
State Board of Nursing last Decem-
ber giving her the rating of regis-
tered nurse, has recently been grant-
ed the responsibilities of air hostess
for the American Airlines. She flies
on regular routes, plays hostess to
many celebrities, and serves on one
overnight plane each week.

Homemaking Department

Food and Drug Bills Warrant Inspection

With so much consumer informa-
tion being offered the homemaker
every day, it is important that we
stop to consider the new Food and
Drug bills before Congress.

Do you know about these bills? If
not, write to Senator Copeland for a
copy of his Bill S-5, and to Repre-
sentative Virgil Chapman for his Bill
H. R. 300. When you receive them,
study and compare them. They differ
widely but both contain worthwhile
standards.

As you study them, notice especi-
ally what they suggest about "Qual-
ity Standards." The Chapman Bill
provides for multiple standards of
quality for foods while the Copeland
Bill offers a single standard. In this
instance the Chapman provision bet-
ter meets the consumer demand.

Another major point that directly
affects the Homemaker is the section
on "Advertising." It is vital that the
consumer be protected and that, if
violations occur, the parties respon-
sible be dealt with promptly and ef-
fectively.

Homemakers, do your part. Study
these bills. Express your opinions to
your Senator and Representative in
Washington. Help to insure adequate
protection for all consumers, and also
benefit legitimate business.

E. M. Moore

Ask the Volta Bureau

The knowledge that deafness is
present and that it is incurable comes
with the force of a major calamity.
It is so crushing in its effect that
something positive in the way of
help must be offered immediately if
the afflicted individual is not to spend
desperate years in a bewildered ef-
fort to adjust himself.

The parents of a deaf child should
be told that the child can be taught
to speak and successfully educated,
and that this education may begin
at home even though the child is not
more than two years old. The parent
of a child whose hearing is only
slightly impaired may learn the sci-
entific adjustments which should be
made. The hard-of-hearing adult may
acquaint himself with lip reading,
hearing aids, and social efforts on his
behalf.

The Volta Bureau was established
for the purpose of furnishing all this
information to all who ask for it. Its
services are free. Alexander Graham
Bell, the son of a hard-of-hearing
mother, the husband of a deaf wife,
the lifelong friend of everyone hand-
icapped by deafness, used the money
he received as a prize for inventing
the telephone to found the Volta Bu-
reau so that everyone confronting
the problems of deafness might be
assured of help.

Cake Variations

One of the most popular cakes
among the students in the homemak-
ing department is the Standard But-
ter Cake. The foundation recipe is
easy to make and many delicious va-
riations can be made with it. The
Standard Butter Cake recipe con-
tains:

1-3 cup butter	2 cups flour
1 cup sugar	3 T. baking powder
2 eggs	1-4 t. salt
1 t. vanilla	1 cup milk

General Directions

Cream butter; add sugar gradual-
ly and cream well; add unbeaten
eggs one at a time and beat thor-
oughly after each addition (or) add
eggs already beaten, (or) add beaten
yolks and fold in stiffly-beaten whites;
add flavoring; add sifted dry ingre-
dients and milk, alternately.

Variations

Spanish Cake

Sift with dry ingredients 1-2 tea-
spoon cinnamon and 1-2 teaspoon
allspice.

Chocolate Cake

Melt 2 squares chocolate and add
to mixture last. Best results are ob-
tained if 1 tablespoon of flour is de-
ducted for each square of chocolate.

Marble Cake

Melt one square of chocolate and
add to half of cake mixture. Place
mixture in layers in pan.

Frosty Fruit Cake

Make Standard Butter Cake. Bake
in 3 greased and floured pans and
put layers together with following
mixture::

2 1-4 cups sugar	1 t. baking powder
1 t. lemon juice	3-4 cup boiling water
Whites of two eggs	
1 cup mixed figs, cherries and pineapple	

Boil sugar, water and baking pow-
der without stirring until syrup spins
a thread (238 degrees). Beat egg
whites until dry. Cool syrup and add,
gradually, beating until consistency
spreads. Add flavoring and cool. Add
fruit to 1-3 icing and spread thickly
between layers. Cover tops and sides
of cake with plain icing. Decorate
top with nuts if desired.

Yolanda Scamperino

Advice is given on schools, pre-
school training, lip reading, hearing
aids, social contacts and psychological
difficulties. While the Volta Bureau
is not equipped to do employment
service, it gives information regard-
ing the fields of activity which are
open to the deaf and hard-of-hearing.

The "Volta Review," a magazine
for parents and teachers of the deaf
is on the reading table of many phy-
sicians. Pamphlets dealing with all
phases of deafness, with the excep-
tion of medical problems are avail-
able to all who ask for them. A list
of such pamphlets and sample copies
will be gladly sent, free of charge.
The Volta Bureau is located at 1537
35th St., N. W., Washington, D. C.

Mary E. Roundy, R. N.

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

MARCH, 1937

STUDENT EDITORS

Homemaking Department

Louise Spofford, Danvers
Elizabeth Pyburn, Newbury
Elizabeth Colby, Newbury
Yolanda Scamperino, Lawrence
Lena Tela, Lawrence

Agricultural Department

Leonard Duratti, Swampscott
James Keane, Nahant
Norbert White, Lynn
Paul St. Linger, Beverly

EDUCATION THROUGH STORY-TELLING

Ever since the beginning of things the story-teller has been a personage of great power welcomed by young and old. Primitive man was fond of power, and realizing that his talents made him mighty the narrator exercised them in such a manner as to promote their development. He grew more and more entertaining and imparted knowledge to the young by keeping alive the tribal traditions.

During the Middle Ages there were the Ballad Singers, very privileged characters, who were free to wander at will into camps or courts. There was always great joy when the Ballad Singer appeared, for he sang of the great victories, romances, sorrows and events that had come to pass. Through these story-tellers have come our popular legends, myths, and fairy tales which were passed down through different nations.

The story-tellers, everyone of them, were subjects of kings and nobles, yet often were mightier than the masters who held their destinies in their hands.

However, the power of the narrator did not die with chivalry. The narrator's art is in truth a magic luminary, an un-failing means of bringing hidden beauties to sight and causing them to be loved because they give pleasure.

It is an accepted fact today that story-telling is of value in the kindergartens and primary schools. Gradually, educators have found that this same value can be carried over into groups of older children, especially in fields of geography, history, art, and ethics.

We must realize that the purpose of story-telling is not merely to entertain, although it does entertain, but that in addition to delighting young listeners, there must be a higher aim, of which the narrator never loses sight. Every tale selected must contribute something definite toward the mental, moral, or spiritual growth of the child. Experience with hundreds of parents, teachers, and workers with children has brought conviction that a belief in the value of story-telling as an educational tool is sincere and general.

Stories for smaller children are usually rhythmic and contain much repetition, a quality very entertaining and amusing to younger children.

Story-telling is included at this School, as a part of the English work during the Senior year. The girls learn to tell stories in a simple, conversational manner. This work trains the students to speak more easily, trains the memory, and is an aid in their child care work, as it provides a way for entertaining children. The girls have learned such stories as "The Gingerbread Man," "The Gray Pony," and "Black Sambo."

Lena Tela

WRESTLING

On Saturday, Mar. 6, the Essex Aggie wrestling team travelled to Dummer Academy to defeat a highly rated team with a score of 18 to 11. The team led by Archie Nimmo, consisted of:

Thomas Dederian
John Marshall
George Foster
Merle Graffam
Chester Silva
Albert Lee
Lawrence Bettencourt

A return bout will be held shortly.

P. St. L.

ALONG MAIN STREET

"Along Main Street" is a movie film illustrating personality in the business world. This film was shown to the members of the Senior class who will soon be going out into the world of business.

Personality in business is summarized in five factors which were explained by examples. Personal appearance amounts to a great deal; a customer does not like to walk into a store and see an unkempt clerk. A business person should look as if he had some interest in his appearance.

Facial expression registers a pleasant feeling, if it is not sullen or indifferent. If an employee's face has an expression of gloom a customer is apt not to revisit his establishment.

A third factor is a friendly voice. An ill-natured or disinterested voice is not pleasing to hear. A voice of this kind will not lead to many business transactions.

Interest taken in the customer will make a person feel as though he were welcome to do business.

Enthusiasm is another important factor in the personality of a business person. An employee who does not encourage the buyer to buy is not an asset to his employer.

The five factors discussed will help to build up a personality which is needed in business to bring in the sales. The sales are needed in order to pay the bills which enter into any business man's life. "Treat your customer as you would a guest in your home."

This film was shown through the courtesy of the Coca Cola Company and their beverage was served after the film.

E. P.

ALUMNI NOTES

New Addresses:

Edna L. Flye, 1930, R. F. D. 1, Westville, N. H.
Helen Ehrlich, 1934, 2505 13th St. N.W., Washington, D. C.
Nathan Clark, 1933, 43 Crosman Ave., Beach Bluff, Mass.
L. D.

AMATEUR SHOW

On February 26, the F.F.A. acting as hosts to the Echo Club, presented a most enjoyable amateur show. Francis Gillen gave an excellent performance in his role as Major Bowes. The contestants included: Walter Hichens, xylophone soloist; Barbara Metzger tap dancer; Clarence Mitchell, musical saw; Karl Beal, songs; Irene Snell, military tap dance and concertina; Sheehy and Buder stage act; Warren Towne, violin; Elsa Robb-lee, tap dance; Ruth Randall, piano solo; Jacobson and Shaw, song and guitar; Richard Mulally, immersions and tap dance; and Russell Weinhold, guitar and songs.

The judges awarded prizes to Russell Weinhold (\$3); Richard Mulally (\$2); and Irene Snell (\$1).

Following the show, dancing was enjoyed to the strains of music from Delmar and her girls.

J. K.

FOODS LABORATORY EQUIPMENT

Students were pleasantly surprised on Monday morning, March 15, when they found brand new equipment in both foods laboratories. It consists of four new tables with ample working facilities for 16 girls in either kitchen. Each girl has one drawer and one closet which contains all the necessary equipment to work with. The molding and chopping boards slide conveniently in and out of each table. In the downstairs laboratory where working is done on a larger scale, an extra shelf is provided on each table for the extra equipment they may use.

These beautifully finished tables were made by the boys in the Farm Shop under the supervision of Mr. Fred Hardy. The girls enjoy cooking twice as much as formerly, and we'll show our appreciation by giving them the best of care.

Y. S.

ECHO CLUB ACTIVITIES

Sometime in April the Echo Club is sponsoring an interesting lecture and motion picture entitled "Cotton." This motion picture in the Commerce and Industry Series, presents the story of the production of cotton fabrics, from the planting of the seed to the finished product.

The film shows, in animated maps, the cotton growing regions of the world and the cotton belt of the United States; then the planting of the cotton seed; the fertilization and cultivation of the plant; the flowers; and the development of the cotton ball.

The picture will show the processes involved in making cotton cloth from the time the bales arrive at our New England mills to the making of articles from the cloth. Besides being very educational it will also be interesting to watch the many steps involved.

On March 24, Miss Battle, of the Mello Rine Banana Company, gave an interesting talk and demonstration about bananas. The talk included the value, preparation, and the place in our diet of bananas. Miss Battle was assisted by two girls from the school.

Bananas are a great favorite with many of the girls and they were interested in hearing about the many new uses for them.

Y. S.

PUBLIC SPEAKING CONTEST

The annual F. F. A. public speaking contest was held on March 3 and 4 at the School. The speakers and their subjects included:

"The Dairy Goat"	Norbert White
"Women in Floriculture"	Rhea Gosselin
"Cooperative Agriculture"	Walter Stacey
"The Guernsey, a Quality Cow"	Richard Paulsen
"The Value of the CCC"	Carroll Killilae
"Essential Requirements for Sanitary Milk Production"	Russell Weinhold
"Thoughts on Roadside Stands"	Charles Mahoney
"The Story of New England Agriculture"	Aubert Giles

The judges after careful deliberation, placed Charles Mahoney first, Norbert White second, and Carroll Killilae third and alternate. These three students represented our School at the Regional contest held at the Norfolk County Agricultural School Mar. 10, a report of which will be found on page 1 of this paper.

J. K.

The favorite hosts of the eastern tent caterpillar are black cherry, fire cherry, and choke cherry. Next to these, apple is the most preferred.

One out of every three farmers in Massachusetts produces market garden crops for sale, according to vegetable gardening specialists at Massachusetts State College.

If maple trees are tapped too late in the spring, the syrup will have what maple connoisseurs call a "buddy" flavor, which disqualifies it for top grade.

FROM THE ALUMNI

To the Graduates:

If you have not received any Alumni mail for this year just refresh your memory a bit. Perhaps your dues are not paid for the year 1937. In the past, mail has been sent to all the graduates, but this has been discontinued. With an ever-increasing graduate list, and only fifty per cent living in or near the County, the expense of printing and typing and mailing is considerable. Consequently, this year we have only been in contact with the paid Alumni members. Though far and near, they are anxious to hear of the doings and whereabouts of their classmates. Your alumni journal is ready and waiting for you. Send your dues to the Secretary (Horace J. Shute, Hathorne), and you will be surprised to learn how active the association really is at present.

To the Senior Class:

The Alumni officers voted to invite the Senior class to take active part in the Association, free of dues, until graduation day when dues of fifty cents a year are payable.

The officers of the Senior class and the senior officers of the "Green and White" are carried over to the Alumni Committees and are invited to take an active part in all Alumni affairs.

To the Undergraduates:

The Alumni Association may not interest you at the present time while still attending school, but it is in later years, when you have drifted away, you will think of the friends you made at school. "Where are they now, and what are they doing?" Now is the time to look ahead and to decide that you will keep in the Alumni Association from the time you graduate so that you can come back to the reunions held every November and live over the fond memories that grow dearer year by year.

Alumni Fair:

Plans are already under way for an Alumni Fair to be held at the School in the fall. The date will be announced later.

Each student and graduate is asked to do his part by donating some article made or raised in connection with his studies at Aggie. No article will be too large or too small to exhibit. Everyone is asked to take an active part.

L. D.

F. F. A. OFFICERS

The following officers were elected on March 18 to the F. F. A., for the ensuing year:

President: Jacob Ranta
Vice-President: Allyn Trask
Secretary: Joseph Arnold
Treasurer: Albert Batchelder
Reporter: Leonard Duratti

Representatives:

Senior: William Corning
Junior: John Balzarini
Sophomore: Richard Sturtevant

INSTRUCTORS DEFEAT STUDENTS

The picked basketball team of the freshman class was defeated 23 to 10 by the instructors on Mar. 3 in the school gymnasium. Jack Sturtevant was outstanding for the instructors, scoring 16 points, while William Tennyson led the Freshmen with 6.

The line-ups were as follows:

Instructors

C. Shannon Wright	LF
H. J. Shute	RF
C. O. Cartwright	C
F. H. Couchig (coach)	LG
J. Sturtevant	RG

Freshmen

William Tennyson	LF
Warren Nelson	RF
Fletcher Wonsion	C
Richard Sturtevant	LG
Francis Rogers	RG

P. St. L.

MAKING CANDLES

In the days of our grandmothers and great grandmothers, lighting was not effected by the simple press of a button. The only light came from kerosene lamps and candles. The candles were all made by hand and the process was tedious.

Because Mrs. Butman of the Home-making School, had a candle mold which had been handed down for many years, she decided to make candles in class. The first process involved preparing the fat, which consisted of two parts lamb fat and one part spermaceti. While this was heating, the wicks were threaded through a hole in the mold and tied on the under side. When the hot fat was poured into the mold care was taken that the wick was in the center of the mold. When the candles became firm the knots on the under side were cut. The mold was placed on the floor, held down by the feet, a tug was given on the wick end and out came a nicely shaped candle. The first batch was so successful a second batch was tried a few months later with equal success.

Barbara Metzger

STYLE SHOW

Miss Gladys Winegar, who gave on Farmers' and Homemakers' Day, a style show in cottons, is the director of the Textile Education Bureau, New York City. The following girls took part in the demonstration of the various styles and materials:

Edith Sharn, Methuen
Bertha Foley, Lawrence
Irene Snell, Beverly
Louise Minichello, Ipswich
Yolanda Scamperino, Lawrence
Elizabeth Pyburn, Peabody
Edna Wilmot, Beverly
Helen O'Hearn, Rockport
Lemyra Briggs, Methuen
Edith Moody, Methuen
Gertrude Lawton, Methuen
Mary Lafond, North Andover
Margaret Spinney, Lynn
Lena Tela, Lawrence
Edith Skidmore, Lynn
Grace Raimsey, Methuen
Anna Gioco, Lawrence
Ruth Merrill, Methuen

L. S.

Farmers' Share of Food Dollar Increases

Farmers received forty-four cents of the consumer's food dollar in 1936 compared with forty-two cents in 1935 and an average of thirty-three cents in 1932.

These figures are based on fifty-two food items which represent seventy-four per cent of all foods purchased. The largest average portion of the consumer's food dollar received by farmers was sixty cents in 1917. The 1932 average of thirty-three cents was the smallest portion received by farmers in the twenty-four years of government record.

In 1936 the average workingman's family spent \$342 for the fifty-eight foods included in the report. Of this sum, farmers received \$152, and the difference was the amount paid for transportation, processing, and distribution. The Bureau of Agricultural Economics avers that improvements in the efficiency of marketing will tend to reduce these costs and bring about lower prices to consumers, better incomes for farmers, and greater profits to processors and dealers whose efficiency is increased the most.

New Records For Pullorum Tests

With the 1936-37 testing season still incomplete, more Massachusetts chickens have been tested for pullorum disease than in any previous year. So far 305 flocks representing 448,210 birds have been tested, an increase of 118,551 birds over the highest mark 17 years of testing.

The number of birds tested has been climbing steadily ever since the testing work began. This indicates a determination on the part of Massachusetts poultrymen to rid their flocks of this disease which in the past has cost them hundreds of thousands of dollars. With the present supply of officially tested non-reacting stock, the Massachusetts poultry industry is in a position to make rapid progress in replacing untested and known infected flocks.

Approximately 91 per cent of the total flocks tested were non-reacting. Of the total birds tested, 95 per cent are in non-reacting flocks.

That poultrymen value the service is shown by the fact that 74 per cent of the birds tested this year are in flocks that have been tested for three or more consecutive years. Only 0.8 per cent of birds were reactors. Of all the birds tested, 0.38 per cent were reactors.

Owners of untested and infected flocks are advised to buy replacements from officially recognized pullorum clean stock. Lists of poultrymen whose flocks have been tested and approved may be obtained from the County Agricultural Agent, F. C. Smith, Hathorne.

Services Offered Soil Conservers

Methods whereby residents of Essex County may earn Federal grants under the Soil Conservation Act, include improvement, thinning, and pruning of timber lands and the transplanting of approved seedlings of desirable varieties.

Professor R. B. Parmenter, Extension Forester of the State College, has been visiting, personally, farmers who request assistance and guidance in this project. Application for this service should be made through F. C. Smith, County Agricultural Agent, Hathorne.

Farmers desiring surveys of their fields, for estimates, may also apply to the County Agent. Students, under the supervision of this School, will make these surveys, at cost, and will include maps with their reports.

County Conservation Association Formed

Estimates Government Grants For County \$20,000

The Essex County Agricultural Conservation Association, meeting on March 9, adopted its by-laws, and elected the following officers:

President: Melville Grey, Wenham
V. President: Harry Cole, West Box-ford

Members of Executive Committee:

Joseph Smith, Lynnfield
C. D. Abbott, Andover

The committee has charge of the selection and appointment of field supervisors, the checking of work sheets and applications (for government payments) of individual farmers in the county.

The expenses of county committee members and field supervisors will be deducted pro rata from the Federal payment to farmers.

The Board of Directors adopted a budget, estimating that government grants would approximate \$20,000 for Essex County.

CATERPILLAR

(Continued from page 1, col. 3)
them more susceptible to borers and other pests.

Commenting on the Bureau of Entomology report, officials have pointed out that the Massachusetts 4-H Clubs are again conducting a drive on the pests and that last year their campaign resulted in the destruction of more than 150,000,000 caterpillars. This year, the club members, 20,000 in all, are planning an intensive drive from March 15 to April 15.

Their main efforts will be directed toward seeking out and destroying the caterpillar egg clusters which are tiny masses welded firmly around the twig ends of wild cherry, apple, and birch trees. Each egg mass destroyed means 300 less caterpillars to hatch this spring. On May 15 the

Garden Notes

Temperature, like water, affects the growth of plants just as much as it affects human activities. There are temperatures at which plants grow best and produce yields and quality fruit. Man can regulate the temperature in greenhouses but not out of doors.

The temperature in the soil affects the intake of water and plant food. In a cold soil the plant does not take in the same amount of water as it does when the soil is warmer.

The amount of food manufactured in plants is regulated by the temperature, the lower the temperature the slower the manufacture of food.

The rate of all growth and formation is regulated by temperature.

Temperature regulates the rate of seed formation in a plant,—the warmer the atmosphere, the quicker seed formation takes place.

The quality of vegetables is affected by the temperature. Chemical changes, such as sugar changing to starch, are more rapid in some vegetables than in others. Corn and peas are good illustrations of this fact. Corn should be picked the first thing in the morning and then kept in a cool place for best marketing results. A back yard gardener should pick corn just prior to meal time in order to have the full sugar content in the corn. Peas are much the same. Tomatoes ripen much faster with high temperatures. The higher the soil temperature the lower production of potato tubers.

The optimum soil temperature for seed germination is 55 to 60 degrees, for beans, cukes, etc., while for cabbage, lettuce, etc., 50 degrees is best.

C. M. Stearns

WILLIAM BUSHBY

(Continued from page 1, col. 2)

poultry. Following are the highlights of his article:

"Stock bred and raised in the vigorous climate of Massachusetts have the stamina to live well and grow fast.

"The laying contests prove that Massachusetts poultry can lay and win against the other birds from all over the country; this in itself shows that Massachusetts stock is superior to others.

"When chicks are bought in this state they are delivered to the buyer in a few hours, with no danger of chilling or overheating during delivery, as is the case when chicks are bought at a great distance from home.

"The difference in price between western stock and Massachusetts birds is so little that it is not worth while to risk money and time in buying cheap chicks of an inferior quality."

club members will turn out for the day to destroy any nests formed by caterpillars which escape the month's campaign.

County Women Display Dressmaking Skill

Included in the exhibits shown on Farmers' and Homemakers' Day at this School, was a clothing and foods display sponsored by the Women's Extension department.

The exhibit consisted of food charts made by Mrs. Mildred Snell, Extension Foods Instructor, showing food prices and health menus. These charts attracted attention from homemakers interested in menus and the ever-changing foods prices.

The clothing exhibits consisted of spring and winter coats. A modish sample was the work of Miss Pauline Goodhue of Ipswich. A child's winter coat, and cotton dress, made by Mrs. Richard Abbott of Andover, were especially commendable. Mrs. Kenneth Forman of Danvers displayed a well-made winter coat, and Mrs. Charles Canney of Ipswich received favorable comments for her checked silk dress.

Requests for additional clothing classes in the county were received by the Home Demonstration Agent on that day.

M. M. McIntire

Managing Moths

Remove Temptation

This is the time of year when homemakers are on the alert for that household pest: the moth. The clothes moth seldom flies directly to a light and remains flitting about it as do many large and small moths which enter the house from the outside. Moths that fly in large numbers about the lights, feed on outdoor vegetation and will not eat household fabrics.

The common clothes moth is usually seen flying in darkened corners and just beyond the range of the brightest rays of the lamp. They prefer darkness and are frightened away when clothing or other objects to which they may cling, are moved suddenly. It is then that they conceal themselves in the creases of clothing, cracks, or other dark places.

Before storing your winter clothing, shake your garments to destroy any delicate moth eggs which may have already been laid. Clean them carefully and store them in moth-proof containers.

M. M. McIntire

SPRING LUNCHEON

Cream Mushroom Soup
Fruit Gelatin Salad
Cream Cheese and
Ginger Sandwiches
Peanut Butter and Brown Bread
Strawberry Ice Cream



4 - H CLUB NEWS



Egg-Production Contest Winners

The following 4-H club members are to be commended for their results in poultry practices.

Blue ribbons have been awarded to those members whose egg-laying average equaled 20 or more (per month); red ribbons to those averaging 17 to 20; and yellow to those averaging 15 to 17.

Winners	Birds	Eggs	Average per Bird	
George Hoffman	Saugus	15	330	22
Alton Page	Saugus	52	1049	20.2
Paul Corson	Saugus	40	800	20
Bruce Bawden	Amesbury	349	6926	20
Sammy Yemma	Haverhill	55	1105	20
Everett Amidon	Amesbury	100	1991	19.9
Billy Purkis	Topsfield	12	214	17.8
Nancy Purkis	Topsfield	10	170	17
George Hannan	Amesbury	12	194	16.2
Willis Lord	Saugus	20	305	15.3

Music Appreciation Songs To Be Broadcast

The state-wide music appreciation program for 4-H club members will run for eleven weeks starting April 3rd. On each Saturday, at 1.30 P. M., station WBZ will broadcast a musical program comprised of songs in the music appreciation contest. As in former years, members will become familiar, through these broadcasts, with the songs, and at the time of the identification contest on June 12, should know by ear, all of the songs in the list.

The music will include:

1. "The Cornish May Song"
2. "The Serenaders"
3. "Tiritomba"
4. "Morning Comes Early"
5. "4-H Field Song"
6. "The Jolly Plough Boy"
7. "Alleluia"
8. "Come to the Fair"
9. "Gypsy Song"
10. "Bring a Torch, Jeanette, Isabella"
11. "Dancing"
12. "Good King Wenceslas"
13. "The Sleigh"

Sewing Machine Contest

Again this year a sewing machine contest will be held for 4-H club girls 16 years or older. We hope that this early notice will give more girls a chance to try out for the county contest to be held in June.

As you know, an electric sewing machine will be awarded the lucky winner.

We would appreciate hearing from any girls who are interested and eligible to enter this contest.

Vera Underhill,
Assistant 4-H Club Agent

Essex County 4-H On Air

Station WLLH, of Lowell, has granted two programs to Essex County 4-H Club work, the first of which was broadcast on March 22.

Listen in on April 5th, at 4.15, to hear the stories of 4-H achievement. This program will be sponsored by the Service Club, with Miss Ruth Cann of Danvers, mistress of ceremonies.

Included in the program will be musical selections by club members, a relating of experiences realized by competitors in 4-H contests, and animated stories of prominent club members and their achievements.

On Saturdays, "Uncle George Farley", State 4-H club leader, comes to you over WBZ, at 1.30.

Attention, Book Lovers

A book-lover's club, sponsored by the State 4-H club leaders, has been suggested for county members. An outline and list of books will be sent to those members interested in a book club project.

Please apply through your county club leader.

National 4-H Club Radio Broadcast

On Saturday, April 3, a program conducted by the U. S. Department of Agriculture in cooperation with the State Colleges, the U. S. Marine Band, and the National Broadcasting Company, will be broadcast over WBZ (at 12.30), and will depict the meaning of 4-H club work on Negro farms.

Tune in and hear the members themselves tell their stories.

ESSEX FARMER AND HOME MAKER

VOL. 18

HATHORNE, MASS., APRIL, 1937

NO. 4

A Word For Pasture Fertilization

If Essex County Dairymen want to save money in feeding, and still not reduce the milk yield, it behooves them to pay attention to pasture improvement by fertilization. It is considered by our field crops instructor, at the School, to be the easiest and quickest way to realize a new farm revenue.

Pastures are not thought of as cash crops, but a pasture fertilization program will bring cash returns not long after the fertilizer has been applied to the soil.

Get more and cheaper milk from your cows by treating your pastures this spring as you treat other farm crops.

Is Dairying Profitable?

Labor income is the term used after deducting all expenses, labor costs and interest on capital invested. Studies in New York State during 1936 showed wholesale Grade 'B' milk farms in Herkimer and Scholharie



Courtesy, N. E. Dairy & Food Council

counties netted a loss of \$77.00, while Grade "A" milk farms showed a labor income of \$376.

This confirms our opinion that real profit for dairy (or poultry) farmers in Essex County implies a special quality product and the retailing of the larger part of these products.

F. C. Smith,
County Agricultural Agent

Gardeners, Verify Your Theories

Do you know when it will be safe to set out tender plants? Maybe you do, but it is well to remember that many people guess wrong each year.

These people have expended time, effort and money for a few blackened stubs of what had been the embryonic expression of an anticipated yield. A record of last killing frost dates going back for five or six years would have saved many of the attending ills associated with wasted effort.

Frost dates and other records pertaining to the plants you grow will prove of value to you in planning a season's gardening activities. Why not consider recording some of the following observations? If you do so, classify them under separate headings in your notebook.

A. Vegetable Information for

Separate Crops

Date planted or set
Date of Bloom
Date of First Harvest
Days from Planting to Harvest
Days from Bloom to Harvest
Date of Last Harvest
Length of Harvest Period

B. General Information

Date of Bloom of trees, shrubs, annuals, perennials, wild flowers, grasses, and legumes

Date of Foliage Appearance of trees, shrubs, and perennials

Date of Appearance of wild flowers, weeds, and birds

Date of Appearance of insects and diseases on all plants

Extent of Damage and Effectiveness of Control Measures.

GET THE NOTEBOOK HABIT
AND ELIMINATE GUESSWORK.

James F. Gallant

Start Chrysanthemums Now

Satisfactory chrysanthemums for the fall garden are best procured by starting young shoots now. You will find that chrysanthemums are beginning to send up a great number of small plants at this time of year. Each one of these slips removed from the parent plant and established in a new location will, by fall, assuming that it is well fed, become a large blooming plant. In fact it will produce far better flowers than the parent plant did. This is due to the fact that our best flowers are borne on young wood.

Two Hands Better Than One

A device which strawberry and raspberry pickers will welcome is the fruit box carrier, oblong pint types or square quart types; an appliance made of one piece of high grade Tin Plate, fastened with pure Tin, electrically fluxed. It holds twenty nested boxes and may be suspended from the neck of the picker to simplify picking.

Mr. T. P. Driver of Georgetown makes them, and says that they eliminate extra handling of berries from the vine to the consumer.

Essex County Trees Severely Girdled

Meadow Mice Offenders

Mice have girdled the trees in many orchards this winter. Evidence was recently indicated at the Long Hill Orchard, West Newbury, and the Brooksby Farm in Peabody, by Donald B. Spencer, research expert, Bureau of Biological Survey, Washington, D. C., who demonstrated new control measures. He disclosed that the meadow mouse has been the chief offender.

New poisons for orchard mice, superior to strychnine, are being developed by the Bureau of Biological Survey and will probably be on the market next fall. Among them is zinc phosphide, used on fresh bait (apples) or dry bait (crushed oats), and placed like strychnine coated bait under the grass or in runways under mulch in the orchard.

Wednesday,
June 9
BETTER
HOMES DAY

Spray Charts For the Asking

Spray charts have been prepared by experts at the Massachusetts State College for potatoes, truck crops, and fruits (apples, peaches, plums, and grapes).

If you desire any of these charts, write to your County Agricultural Agent, Francis C. Smith, Hathorne, Mass.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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SUBSCRIPTION 25c PER YEAR

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Essex County Rabbit Breeders' Association	
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Northern Essex Beekeepers' Society	
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Eastern Massachusetts Society of Beekeepers	
Secretary, E. S. Batchelder	Gliffondale
Essex County Milk Goat Breeders' Association	
Secretary, R. H. Campbell	Topsfield

Calendar

April 30—End of class room instruction in Agricultural Department. Students go out on summer farm projects.

April 30 to May 10—Spring vacation for students in Homemaking Department.

May 3—Monthly meeting of Essex County Goat Breeders' Association. 8 P. M. at this School.

June 9—Better Homes Day, sponsored by the Women's division of County Extension Workers.

June 23—Parents' Day at this School.

Nuptials

Florence Richardson,
former instructor in the Homemaking
School

to

Paul Wesley Pearson, of Ware
April 10, 1937

Dorothy Reid of Saugus

to

Edward Batchelder, class of 1929
March 28, 1937

Bertha Clarke, undergraduate
to

Gordon Tidd of Byfield
March 7, 1937

Homemaking Department

Petroleum

The candlemakers and whale fishermen of a hundred years ago at first paid little attention to a new illuminant called kerosene, which was recommended for use in lamps. In a few years kerosene lamps were used so widely that candles and whale oil were forgotten.

Kerosene was one of the first of petroleum compounds which have become so important in modern life. Crude petroleum is an oily liquid with an unpleasant odor. In color it ranges from amber to greenish-black. It is a complex mixture of liquid and solid hydrocarbons. Crude petroleum is used for making water gas and as a fuel in Diesel engines.

The four most important commercial products obtained from petroleum by distillation are gasoline, naphtha, benzene, and kerosene.

The invention of the gasoline engine has made petroleum an important factor in our economic life. At present the United States, Russia, and Mexico are the world's chief producers of petroleum.

Italy and Germany are seriously handicapped by lack of an easily available source of petroleum. In both countries experiments with substitutes for gasoline are being carried on. In Germany, wood is being used experimentally, while in Italy substitutes derived from grains are finding favor.

Constance Lovett

Instructor in Related Sciences

Hats

Hats were originally intended to protect the head from sun and cold but upon being found flattering in many cases their purpose became two-fold and they were worn with an eye to their ornamental attributes.

The first form of hat, and one that is still in use today, was the turban taken from Oriental countries.

The toque was an early form of hat, not unlike the turban.

Bonnets, extravagantly trimmed and resembling infants' caps, were worn in England by both men and women during the fifteenth century.

Poke bonnets came into favor following the French Revolution.

Mary, Queen of Scots, introduced the custom of wearing mourning bonnets.

The Tam-O-Shanter owes its name to the hero of Burns' poem. It was first worn by the Scottish plowman.

The mortar board cap, standing for education accomplishment, came down from medieval times.

Modern hats, it would seem, are borrowing the styles of their ancestral sisters.

Abbie Clapp,

Clothing Instructor

Home-Grown Cereals and Pantry Pests

Whether the home-grown cereals are wheat flour, whole-wheat breakfast food, corn meal, or rice, they must be given just as much care to protect them from insect pests in warm weather as any cereals bought in packages at the store. In fact, it may be even more difficult to store these products under household conditions than when they have been subjected to a thorough sterilizing treatment in a mill or factory and then sealed in airtight packages. Cereal beetles or weevils can live for a long time on very small quantities of dry cereal that they find in cracks, corners, and crevices of flour bins, pantries, and kitchen closets. When the new lot of cereal comes in, the eggs may already be in the old container ready to hatch out into larvae which soon become very troublesome.

So it pays to clean out all cereal receptacles thoroughly before new material is put in them, and also to go over the pantry shelves carefully with a stiff brush and soap and hot water to remove any old crumbs of cereal, flour, or bread that may be lodged out of sight, or any dust or lint which might harbor insect eggs.

The Indian-meal moth is one of the cereal pests that make a loose webbing sometimes found in cereal boxes. Cleanliness and heat are the best methods of ridding the kitchen and storeroom of meal beetles and moths. All infested material should be burned. All bags and containers in which foods are to be stored should be sterilized.

Put away promptly any home-grown cereals in clean containers with lids and, if possible, do not keep too much on hand during the warm weather. The flavor will be better and the chance of insect infestation will be less if cracked wheat and water-ground corn meal, especially, are prepared in small quantities that will be quickly used.

Home For Birds

There are economic as well as aesthetic reasons for building homes for birds. Birds exert a steady influence on keeping down the swelling tide of insect life.

Forty-eight different species of birds in the United States are known to have nested in homes built for them. Those frequently using nest boxes are bluebirds, wrens, starlings, tree swallows, martins, and song sparrows. Also included are chickadees, titmice, nuthatches, flickers and other woodpeckers, screech owls, sparrow hawks, and wood ducks.

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

APRIL, 1937

STUDENT EDITORS

Homemaking Department

Louise Spofford, Danvers
 High School Special
 Elizabeth Pyburn, Peabody
 High School Special
 Elizabeth Colby, Newbury
 Senior
 Yolanda Scamperino, Lawrence
 Senior
 Lena Tela, Lawrence
 Senior

Agricultural Department

Leonard Duratti, Swampscott Junior
 James Keane, Nahant Senior
 Norbert White, Lynn Senior
 Paul St. Linger, Beverly Senior

FINAL SPEAKING CONTEST WINNERS

Results of the final speaking contest, sponsored by the Future Farmers of America, and held in Hatfield on March 19, show that Norbert White of this School placed first. His subject was "The Dairy Goat."

George Hibbard, Hopkins Academy student, was runner up, speaking on "Making the Most of our Dairy Breeds."

The winner of the third prize was Roland Cullenberg of the Bristol County Agricultural School, who discussed "Soil Conservation." Albert E. Simoni, of Norfolk, winner of the fourth award, chose for his topic, "Juliet's Preference."

The highest ranking speaker, eligible under the F. F. A. rules, will represent Massachusetts in the Regional Contest in September.

Leonard Duratti

STUDENTS CONTRIBUTE TO GRANGE PROGRAM

On April first, a group of Aggie students furnished part of the program for the afternoon meeting of the Essex Pomona held at the new Hall of Laurel Grange, West Newbury.

The program consisted of a violin solo by Warren Towne, vocal solo by Carl Beal, tap dance and imitations by Richard Mulally, tap dance and accordion solo by Irene Snell, guitar and singing by Russell Weinhold. Ruth Randall, who was piano accompanist for most of the performers, gave a piano solo as well. Walter Winn acted as announcer. All of these numbers had been previously well received by the students at the School at an Amateur Contest.

Charles Mahoney, Rhea Gosselin, and Norbert White, all members of the School's public speaking team, gave very interesting talks.



BOYS' BASKETBALL TEAM, 1937

Back Row: James Cashman, f; Walter Tataronis, g; Joseph Arnold, Assistant Manager; Warren Killam, Manager
 Middle Row: George Georgantis, f; Jacob Ranta, g; Captain Gildo Santin, c; Howard Wilson, c; P. H. Couhig, Coach
 Front Row: Gary Sano, g; John Fay, f; John Munroe, f; Frank Conti, f.

Throughout the season, a spirit of optimism prevailed with the Basketball Squad. The boys had all played considerable basketball and were able to conquer most of the opposition anywhere near their class. The final tabulation gave our boys a total of ten victories and seven losses, where they amassed 544 points as their opponents were scoring 436. The varsity had thrilling games with Winthrop, Peabody, Boston Boys' Club and Stockbridge. The second team was a marvelous group of opportunists, winning ten and losing only three games. They were involved in 6 close games which were decided by 1 or 2 points and our boys won 4 of these.

The prospects for next year are exceptional. Six of the first team are not graduating and only Cashman and Conti of the second team will fail to answer next year's roll call. Captain Santin sang his swan song very appropriately in the Stockbridge game by tossing in the winning basket in the over-time period. "Geek" Santin will be missed for he has been a mainstay for four years in succession, a record not even threatened by anyone else in the school's history.

F. F. A. DUES

At a special general meeting of the Essex Chapter of Future Farmers of America, the following fees were approved for next year:

Membership (State and local chapters)	\$45
"Green and White" subscriptions	.45
"Essex Farmer and Homemaker" subscriptions	.25
Athletic Association dues	.75
Total	\$1.90

WILLIAM DIMICK F. F. A. SPEAKER

On Wednesday, March 31, Mr. William F. Dimick of the Massachusetts Nautical Schoolship "Nantucket," addressed members of the Essex Chapter of Future Farmers of America at their regular month's meeting. Mr. Dimick's subject was "Massachusetts in Nautical History."

The speaker told of the early ships of Massachusetts and spoke of the opportunities offered to the American youth of today. Mr. Dimick accompanied his talk with slides.

L.D.

HONOR ROLL

Agricultural Department

The final scholastic honor roll in the agricultural department of the School boasts a greater percent than during any previous term in the year. Following are the names of students whose efforts have been rewarded.

Theodore Smolak, Henry Smolak, David Rennie, John Wilcox, N. Andover. John Fullington, Allyn Trask, Peabody Warren Kneeland, Walter Tataronis, John Fay, Karl Beal, Salem.

Sargent Griffin, Joseph Arnold, Gloucester Percy Curtis, Jacob Ranta, John Balzarini, Rockport.

John Kukene, Amesbury. Leroy MacAloney, Groveland. Paul Parker, Fred Scribner, Topsfield Leonard Duratti, Joseph Mattera, Nicholas Delisio, Swampscott.

Elmer Luxton, Clarence Mitchell, Wenham.

Warren Killam, John Ylitalo, Aubert Giles, Robert Spencer, Arthur Walker, Raymond Pead, Danvers.

Gildo Santin, Paul St. Linger, Warren Towne, Gilbert Freeman, Leavitt Moulton, Edward Cook, William Corning, Howard Wilson, Raymond Kennedy, Roger Coleman, Alden Crosby, Donald Gasper, Beverly.

Archie Nimmo, Donald Nelson, Clifford Nelson, Walter Winn, Russell Weinholt, Warren Nelson, Howard Stone, John Wadsworth, James Barnes, Methuen Merle Graffam, James O'Neill, Sidney Johnston, Gary Sano, Francis O'Connor, Paul Kelley, Lynn.

Clayton Teague, Frank Stacey, Albert Greenaway, Marblehead.

Francis Gillen, Gerard Hamel, Newton Henricson, Lawrence.

Albert Batchelder, Norman Peatman, Conrad Nollet, Andover.

David Elwell, David Foss, Essex.

Walter Hichens, J. Philip Webber, Louis Rosi, Middleton.

Henry Smith, Willis Lord, Saugus.

Ievon Amrhein, Haverhill. Charles True, Salisbury.

PRACTICE TEACHERS

As a part of the program of the Junior Year at Framingham State Teachers' College, the students go to different schools in the state as practice teachers for a period of ten weeks.

This year Miss Frances Clark was at this School for the ten weeks ending Friday, April second.

On April fifth Miss Myrtle Schneider, of Hudson, replaced Miss Clark and will remain through the end of the school term to work with the Freshman girls in foods, clothing and science classes, and with the Juniors in costume designing.

Barbara Clark

Carl Swanson, '32, of Rockport, is making a notable record at Massachusetts State College, where he was recently elected to Phi Kappa Phi, honorary society.

Harold Wilson, '24, is employed at the Market Garden Field Station, Waltham.

EGGS FOR HEALTH

Eggs at present are reasonably priced, and more of them, for this reason, should be used. The most important fact to remember in cooking eggs is that they are toughened and made indigestible by fast cooking at a high temperature. If they are cooked slowly at a low temperature, eggs are tender.

We commonly speak of boiled eggs but actually eggs should never be boiled. The approved method is to "soft-cook" them by bringing them slowly to the boiling point, reducing the heat and allowing to stand at below boiling temperature for from five to eight minutes. Hard-cooked eggs should be left standing from thirty to forty-five minutes.

At this season of the year when eggs are both good and plentiful use them generously as a main dish at luncheon or supper, as an occasional substitute for meat, or as a protein addition to your spring salads.

There are many ways of using the whites or yolks left from the making of such dishes which call for one or the other only.

Good Uses for Egg Whites

Angel food and White Cake
Kisses
Fruit sherberts
Snow pudding
Cake frostings
Meringues of all types

Good Uses for Egg Yolks

Custards, baked or soft
Golden cake
Mayonnaise, boiled salad dressing
Eggnogs

Anna Gioco

ATHLETIC BANQUET AND DANCE

Over 150 students and alumni attended the annual Athletic Banquet and Dance held at the School on Wednesday, March 31.

Starr M. King, Superintendent of Schools of Beverly gave an interesting talk on the value and benefits derived from competitive football. Horace J. Shute, class of 1927, was master of ceremonies. Following a short speaking program, football sweaters were presented to the following players by Mr. Mostrom:

MacAloney, Manager Cashman, Clinch, Cook, Dederian, Nicholson, Ranta, Sano, Towne, and Trask. Letters were awarded to Captain Santin, Fullington, Balzarini, Gasper, A. Kelly, and Eastwood. Plaques were presented to Burton and Kenny.

Basketball sweaters were awarded to Manager Killam, and John Fay. Letters were given to Captain Santin, Ranta, Munroe, Lee, Georgantis, while plaques were awarded to Tataronis, Confi, Wilson, Arnold, Sano, and MacAloney.

A special award was given to Archie Nimmo for his stellar work on the wrestling team.

After the banquet, the Colony Club of Beverly supplied music for dancing.

James Keane

BANANAS TAKE A BOW

On March 24 the Echo Club sponsored a most interesting program presented by Miss Lucretia Battles of the Mello Ripe Banana Company. As the girls entered the assembly hall they were presented with attractive banana recipe booklets.

Lena Tela, chairman of the program committee, introduced the speaker who began her program by demonstrating the electric deep fat fryer which she used.

Phyllis Marks, Edna Wilmot, and Barbara Clark, three girls majoring in foods, assisted Miss Battles. While she showed the different methods of preparing bananas, the girls were busy preparing banana scallops which were later sampled by the audience.

Miss Battles emphasized several points in the use of bananas. In cooking them, a little salt should be added to bring out their flavor. Bananas should not be over-cooked as they will hold the heat a long time and soften while standing.

Cook bananas in the yellow stage, but serve as a fresh fruit when the skins are speckled with brown.

Bananas, brushed over with a citrus fruit juice, will not discolor, a consideration to be remembered when making a large number of salads.

Bananas in their skins should not be kept in the refrigerator, but stored in a cool closet.

Dietary Value

Bananas are excellent sources of Vitamins A, B, and G, and a good source of minerals. They are 78% water and not fattening as many believe.

Miss Battles' talk was enjoyed by all, and the girls have shown their appreciation by trying out some of the delicious recipes she demonstrated.

Yolanda Scamperino

STUDENTS ENTERTAIN AT POMONA GRANGE

On April 1, a group of students from the Homemaking Department took part in a style show which was part of the program presented at the Essex Pomona Grange, West Newbury. Sports dresses, evening gowns, and a sport suit were modelled, showing some of the latest styles and materials being worn this season. Some of these dresses were made by the students as home projects while others were school projects. Irene Snell described each dress as it was modelled. The following girls took part:

Irene Snell, Beverly
Edith Stevens, Beverly
Priscilla Hopkins, Beverly
Edna Wilmot, Beverly
Ruth Randall, Newburyport
Charlotte Moore, Salisbury
Marjorie Colby, Saugus
Dorothy Page, Peabody
Ruth James, Marblehead
Phyllis Marks, Lynn
Barbara Clark, Lynn
Bertha Foley, Lawrence
Lillian Dionne, Salem
Hazel Mason, Salem

Edna Wilmot

Massachusetts Prospects

Massachusetts farmers are increasing their spring crops greatly over those of 1936.

The following chart reveals the per cent of increase of individual crops:

	Acreage 1936	Prospect 1937	Percent over 1936
Corn	92829	94840	2.2
Spring Wheat	11212	20918	86.6
Oats	33213	35660	7.4
Barley	8322	10901	30.0

The acreages of spring sown crops are likely to be below the five-year average, but above the 1936 harvested acreage.

F. C. Smith,
County Agricultural Agent

Ounce of Spray Prevents Pounds of Pests

One of the greatest difficulties with which the gardeners have to contend is the control of pests. They do much to discourage the gardener from his daily effort to improve the appearance of the garden. There is one satisfaction, however, the fact that pests such as mildew on roses, leaf rust on hollyhocks, and black spot on delphinium can be materially checked with spraying or dusting started at this time of year.

Look at these pests and see how they function. At present the growth of hollyhocks is relatively advanced. They have been pushing through the ground for the past month and are beginning to get ready for a period of outdoor bloom and attractiveness. In a good many cases these plants are affected with leaf rust which mars their beauty and may even keep them from flowering. This disease is caused by a fungus which lives over the winter on vegetable material; and when the warm spring days come along the fungus comes to life and grows on the plant.

In order to check fungus of this type, sanitation must be practiced. That means cleaning up all the debris and infested plants in the garden by burning. The ground should also be stirred up and worked over.

Since practically all fungus and rust is controlled by dusting with sulphur, apply a sulphur dust to the plants themselves and to the ground around the plants. Apply it every ten days during the growing season and the ravages from this pest should be checked. This will also apply to mildew on roses, lilacs, and other plants.

Bacterial diseases on plants (black rot on delphinium) live over in the soil and are best checked by garden sanitation and by spraying the ground from which the plants come, and the plants themselves, as they appear. If

Clean Fruit Yours For the Picking If

You Follow a Recommended Spray
Program and

1. Have adequate mixing and spraying equipment.
2. Use and properly mix the correct ingredients.
3. Do each spray job at the proper time.
4. Apply your sprays immediately after preparation.
5. Have the right disc and the correct pressure.
6. Follow a definite procedure in covering the area.
7. Get thorough coverage; top, sides, and bottom.
8. Follow approved sanitary practices.

James F. Gallant

Boston Better Homes Week April 25 to May 1

Massachusetts Committee
87 Beacon Street

Mrs. James Storrow

Miss Mary Driscoll

Mr. Donald Feeley

practiced faithfully this method will materially cut down infestation of plant diseases.

Peonies should have the ground around them sprayed with Bordeaux mixtures, and last year's growth should be destroyed by burning. This is particularly important in areas where peonies are infested with black bud blight, a disease which causes the buds to fail to open, turn black, and drop off at a time when they should be in bloom.

Garden Chat

Hardening, and Its Effect
on Plants

The subject of hardening plants is an important one at this time of year. To understand what takes place when plants are hardened, one must know the effect of low or variable temperatures on plants, to wit: checking on growth, reduction of succulence, increase of acidity, stimulation of changes in plants which hasten reproduction of seed formation. Hardening, by withholding water, will have the same effects. If plants must be hardened, it is advisable to grow them in the plant house or frame at a temperature above 50 degrees F., and gradually reduce the water, rather than to lower the temperature.

Cabbage if exposed for 30 days or more at 40 or 50 degrees Fahrenheit will produce small heads and will show a strong tendency to "shoot to seed". Early seeded beets if exposed to 40 or 50 degrees Fahrenheit for 20 to 30 days will throw from 30 to 90 percent seeders. Tomatoes, peppers and egg plants if set out too early or if hardened in the frame will produce from 10 to 50 percent less fruit than un-hardened plants (depending on degree of hardening).

Providing hardening is necessary, it is wise to conform to the two practices of keeping plants on the dry side and lowering the temperature, rather than employing either practice to extremes.

Light and Its Relation
to Plant Growth

One of the factors affecting plant growth, that cannot be controlled by man, is light. (Exception: plants grown in greenhouses). Food is not manufactured in plants unless there is light. The less light allotted to plants, the greater the time required for maturing. Tomatoes grown in November and December in greenhouses yield only about 2 pounds per plant, while plants grown outdoors in July produce 10 pounds per plant with the same temperatures, water, and food, but with a difference in the length of daylight.

When plants spindle up or become leggy, the cause may be traced to a lack of light, which in turn may be caused by dirt on top of the hotbed sash, or heavy foliage on the plants, or ill-placed plants in the hotbed. To overcome this spindle growth keep your sashes clean, place your plants nearer the glass, space them or sow your flats more thinly, and prune excessive foliage.

C. M. Stearns,
Instructor, Vegetable Gardening

June 23
Parents' Day

April the Month For Preserving Eggs

The homemaker who buys and preserves eggs during April and early May saves fifteen cents on each dozen she puts in water glass. Besides that, egg quality is high during this period and eggs preserved now will taste better in the fall.

Eggs put up in water glass will keep for six to ten months. Nutritionally they are every bit as good as fresh eggs, and taste as well when used for cooking.

Directions for Preserving

15 Dozen Eggs

Clean, scald, and allow a 5-gallon crock (earthen or stone) to dry. Heat 10 to 12 quarts of water to the boiling point and let it cool. When cool, measure out 9 quarts of water, place it in the crock, and 1 quart of water glass (sodium silicate). Mix the two thoroughly.

The eggs (fresh, clean, and preferably infertile) may be added all at once or from time to time as they become available. The solution must be above the eggs at least 2 inches at all times. Be careful not to crack or break the shells. One cracked or broken egg will spoil the whole mixture.

Keep the container in a cool, dry place and cover with a tight lid or waxed paper.

For the benefit of those who wish to preserve eggs in smaller quantities, the water and water glass proportions are 9 to 1.

If the egg shells are slightly soiled, don't wash them, dampen a cloth with vinegar and wipe them.

Round About the County

Fall Classes

Mrs. Mary M. McIntire, Home Demonstration Agent, conferred with Mrs. Ruth D. Morley, Specialist in the field of child-care, on April 15 and made tentative plans for the organization of leader-training groups in Essex County to start in the fall.

Better Homes Day

Watch the May issue of this paper for announcement of the annual Better Homes Day program, scheduled this year for Wednesday, June 9.

Summer Gardening Classes

Those communities desiring summer gardening classes under A. M. Davis, State Specialist, are asked to notify Mrs. Mary M. McIntire, Home Demonstration Agent, at once. Mr. Davis will be available in June and July, but because his dates during these months are limited, it is desirable that communities send their preferences to Mrs. McIntire with no delay.



4 - H CLUB NEWS



Join A Garden Club

4-H garden clubs are springing up all over the county. Saugus has one. Rowley does too. And so do Andover, Ballardvale, Haverhill, West Newbury, Amesbury, Danvers, and Methuen. 4-H members in every town in the county may form clubs. And it's easy to become a garden club member. Just follow the rules listed below:

1. Care for a vegetable garden of at least 500 square feet.
2. Keep a notebook on garden diseases and other things of gardening interest.
3. Identify, or collect and mount 10 specimens of garden diseases according to a chart prepared by Dr. Boyd of the State College.
4. Keep a record of all expenses for seeds and plants, and fill out questionnaire.
5. Exhibit vegetables whenever possible.
6. If competing for county, state, or national prizes, keep a record of the value of crops grown as well as the expenses; and write a story of your garden club work.
7. Attend garden club meetings whenever these are scheduled in your community.

County Contest Day

May 22nd is the date set for the annual 4-H Club Contest Day. All roads will lead to the Agricultural School for this event. Members of clothing, foods, and home furnishing clubs will compete for county honors. Winners will enter the State Contest held later in the summer.

As has been the custom, the girls entering the clothing contest, will model their dresses in a Style Revue.

Junior and senior club members may enter the foods contest. Junior classes will judge muffins, practical work in the measuring of ingredients, correct table setting, and will identify equipment.

Senior classes will judge school lunches, canned vegetables and fruits, a baked product, and luncheon menus. Each contestant must enter a foods notebook with records of the work done.

Home furnishing club members will judge table decorations.

All club members are invited to enter posters dealing with posture.

Canning Demonstrations

Canning demonstrations by William R. Cole, Extension Specialist in Horticultural Manufactures, will be conducted in Essex County during the summer months. Definite dates will be printed in this paper in May.

4-H Exhibits

The exhibitions of 4-H Club work will start this year on May 1st. Parents and friends are asked to support the clubs by attending local exhibits. Club members are often encouraged to carry on if their friends are interested in what they are doing.

Club members are required to exhibit the work they have accomplished during the year. This work is judged and prizes are awarded.

Besides the exhibit, the club members plan some form of entertainment which may be in the form of a play, demonstration or talk. Many of the clubs this year are planning to dramatize some of the Music Appreciation songs.

We hope you will plan to visit the exhibit in your town.

An interesting booklet on Posture has just been published by the Farmers Wife Magazine, St. Paul, Minn. Leaders interested in our health program will find this little booklet very helpful. The cost is 10c.

Busy Beavers of Boxford Live Up To Name

The 4-H Busy Beavers of West Boxford recently combatted a fire in the woods near the Congregational parsonage. Members fought the fire with brooms, sweaters and coats.

The Beavers also participated in Clean-up Day in their community. Motion pictures were taken of their activities while improving the school grounds.

Essex County Boy Vegetable Garden Delegate

Won Many Honors

Frederick Usher, of Danvers, a 4-H club member for six years, has been selected State 4-H vegetable garden delegate to the State camp, July 15 to 22, with all expenses paid by the Massachusetts Vegetable Growers' Association.

Frederick, a consistent prize-winner at the Topsfield Fair and Boston Horticultural Shows, has shown exceptional ability in County judging teams throughout his 4-H career.

His three acres of garden land have been planted largely to corn and beans. Not only does he grow and sell, at a roadside stand, his produce, but he cans a portion of it each year, and has won innumerable prizes for these products.

ESSEX FARMER AND HOME MAKER

VOL. 18

HATHORNE, MASS., MAY, 1937

NO. 5

Eleven Guides For Home Landscaping

Dignity and Simplicity
Basic Pointers

Attractive home grounds are the result of careful planning. The following guide to landscaping is printed to offer you salutary suggestions for planning your spring plantings:

1. Foundation plantings should be simple, balanced, and well cared for. Avoid crowding in shrubs to get immediate effects. Plan planting effects by visualizing the height and size of a plant when fully grown.

2. Doorway plantings should be dignified or formal. Plant the same shrub on each side of the door.

3. Corner plantings should curve down to the ground.

4. Evergreens and deciduous shrubs may be grouped together if care is used in arrangement. Plant evergreens at doorway and deciduous shrubs at corners.

5. Low houses, such as the Cape Cod cottage, may use annuals such as petunias or perennials like hollyhocks or iris for foundation plantings.

6. High houses need tall-growing spreading plants such as Morrow's Honeysuckle.

7. All poor soil around the base of a building should be removed to a depth of at least 12 inches and filled in with good loam to a width of three or four feet.

8. Plants should be set in a hole sufficiently large to accommodate the root system and filled firmly.

9. Water should be generously applied after planting.

10. Consult a good nursery catalog for interesting plants and the size and type of growth.

11. All broken or misshapen branches, shoots, or stems should be removed with a sharp knife or pruning shears.

Wool Pool June 12

The Massachusetts Sheep Breeders Association, cooperating with the State Department of Agriculture and the County Extension Service, will repeat last year's wool pool at this School on June 12.

Producers are offered the choice of pooling their wool and taking blankets in payment, or selling for cash their raw wool (in the grease).

Kenneth W. Forman, of the School staff, will assist Lester Tompkins of the Department of Agriculture, in weighing-in the wool.

Agricultural Training Proves Increasingly Valuable to The Youth of Today

Students Learn To Do By Doing

Essex County has many educational opportunities but probably the Agricultural School has the most unique educational program. Here students learn to do by doing. The School campus, its farm, its fruit nurseries and its orchards and gardens are worked, under the supervision of instructors, by the students. What is learned in the classroom is simultaneously practiced on the farm.

Six months of the year are devoted to this practical study of farm operations. During the remaining six months, students are dismissed from their classrooms and find employment either on home or neighboring farms or in commercial agricultural plants.

Many successful graduates have chosen agriculture for their life work. The School points with pride to all of them.

Outstanding as an example of the successful graduate is Roger Lewis, class of 1925, son of the Herbert Lewises, Lowell St., Andover. In partnership with his father he farms thirty-five acres planted chiefly to potatoes, strawberries and green corn. Their

woodlot of fifty acres is considered by R. B. Parmenter of the State College one of the finest in Massachusetts.

Among more recent graduates whose farming ability has proved profitable are: Harry Lear, class of 1927, who, with his father, carries on an extensive roadside business, marketing vegetables and flowers grown in their gardens; Robert and Woodbury Bartlett, class of '33 and '31, of Beverly, who have established a nursery business in Hamilton; and Ernest Thayer, class of 1935, who has bought and is managing a dairy farm in Danvers.

Almost daily the School receives news of its graduates. There are some who have taken advanced courses in agriculture and education, and have turned to teaching. Others have directed their abilities to landscaping and superintending the care of grounds on extensive estates.

The School, primarily a practical institution, teaches its students to revere the fruitfulness of the land, and here realism steps over the line to meet an ideal.

Better Homes Day Wednesday, June 16

Annually the women's division of the County Extension Department sponsors what has come to be known as Better Homes Day. On this day it is the aim of the Extension Department to present to all the women in the county, speakers whose comprehension of the significance of "homes" is specific.

This year, on Wednesday, June 16, Mrs. T. Grafton Abbott, parental educational advisor, of the State Division of Health, will open the Better Homes Day program.

Miss E. Kathleen Jones, of the State Division of Libraries, will present, in the afternoon, reviews of contemporary literature.

Mrs. P. E. Gerhardt, representing the Meloripe Fruit Company, will give a foods demonstration, with emphasis on the preparation of bananas.

Exhibits of the work carried on during the winter in Extension classes, including dressmaking, upholstering, and foods preparation, will be on display.

Meetings will be held in the assembly hall of the Agricultural building. The morning session is scheduled for 10 o'clock.

A cordial invitation to attend Better Homes Day is extended by Mrs. McIntire, Home Demonstration Agent, to all friends of the Extension Department and this School.

PARENTS' DAY

JUNE 23

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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SUBSCRIPTION 25c PER YEAR

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Eastern Massachusetts Society
of Beekeepers Cliftondale
Essex County Milk Goat Breeders'
Association
Secretary, R. H. Campbell Topsfield

Calendar

June 12—4-H Club Field Day at this
School.
June 16—Better Homes Day, sponsored
by the Essex County Extension
Department under the direct su-
pervision of Mrs. Mary M. McIn-
tire, Home Demonstration Agent.
See page 1 for program.
June 23—Parents' Day in the Home-
making Department of the School.
June 26—Closing of School for the
Summer.

FARM AND HOME WEEK
AT
MASSACHUSETTS
STATE COLLEGE
JUNE 27 to 30, 1937

A booklet, "Contributions of Ten
Leading Americans to Education",
for use in personal reference lib-
raries, is being offered by the Meredith
Publishing Co., Des Moines, Iowa, on
a non-profit-making basis, for five
cents per copy.

The booklet contains the sound
philosophies of John Dewey, William
James, Werrett Wallace Charters,
Edward L. Thorndike, Alexander In-
glis, Charles William Eliot, W. H.
Kilpatrick, Charles Hubbard Judd,
Ellwood Patterson Cubberley, and
Frank Pierrepont Graves.

Meat Cookery

Ideas relative to the cooking of
meats have recently undergone con-
spicuous changes as a result of much
research carried on to determine
which methods will produce the best
results. Many time-honored theories
on searing, basting, and the use of
covered roasters as a means of re-
taining juices, have been exploded.

Roasts are found to be more ten-
der and to retain more of their juices
when cooked in an open pan with no
water, and not basted. Salt may be
added at any time one chooses. All
roasts should first be seared for 15
minutes at a high temperature
(500°) and then roasted at a moder-
ate temperature (350°).

Following is a time table for the
roasting of different meats. To com-
pute the time required for cooking,
the weight of meat (after it has been
prepared for roasting) should be de-
termined. It is best to remove meat
from the refrigerator long enough be-
fore roasting so that it will lose its
chill, for a cold roast increases cook-
ing time and also increases the loss
of juices.

Beef—Rolled (rare) 25 minutes per
lb.

Beef—Rolled (medium) 30 minutes
per lb.

Beef—Standing (rare) 20 minutes
per lb.

Beef—Standing (medium) 25 min-
utes per lb.

Ham (fresh) 35 minutes per lb.

Lamb—Leg, Loin, or Rolled Should-
er 25 minutes per lb. (If boned, use
weight after boning.)

Pork—Loin, Shoulder or Crown Roast
30 minutes per lb.

Veal—Leg, Loin or Shoulder 25
minutes per lb.

The time table, above, is as accu-
rate as can be given. Allowances
should, of course, be made for dif-
ferences in grades of meats as well
as for differences in individual tastes.

Bessie H. McJunkin,

Instructor in Foods

Amberolcraft

A new craft has been introduced
this year to the Junior course in
handicrafts, and it has proved both
interesting and instructive. It is called
Amberolcraft and the medium is a
synthetic resin formed in the chem-
ical laboratory from the casein of
milk together with other ingredients.
It is non-inflammable, resembles am-
ber in texture, and can be handled
with metal or woodworking tools. It
can be sawed with surprising ease,
carved, filed, sanded, and then polished
to a high gloss either by hand or
by power buffing.

Amberol may be obtained in a wide
range of colors in sheets or in blank
shapes for rings or bracelets, and
thus lends itself to an endless variety
of articles to be made from it, such
as pendants, bracelets, rings, pins,
belt buckles, curtain pulls, book ends,
desk ornaments and many others.

The tools required for amberolcraft
are not many. A jeweler's saw frame
and blades, a half-round file, a round
and a half-round needle file, fine and
medium sandpaper, and buffing com-
pound are all that are needed. For
fretwork it is necessary to have a
drill of the egg-beater type with drill
points, and to provide the necessary
support for this, a V-board or fish-
tail board clamped or fastened on the
work table.

More complicated effects may be
obtained by joining Amberol with
other pieces either of the same or
different materials, wood or metal.
This may be done by riveting, by
screws, by mortising, or by using ce-
ment.

The last, and surely not the least
point to mention in favor of Amberol
is the fact that it is a very inexpen-
sive material, which makes it ideal
for a class project where cost has
to be considered.

Margaret R. Harris,
Instructor in Related Arts

Parents' Day, June 23

Parents and friends of the home-
making students of this School are
extended a cordial invitation by Miss
Moore to visit the School on Wed-
nesday, June 23. An all-day program
starting at 11 A. M. has been plan-
ned in the interest of demonstrating
to the guests the results of the work
carried on during the school year.

A "gym" exhibition will start the
program off. During the noon hour,
12 to 2 (when guests may eat their
box lunches on the school campus),
informal demonstrations in foods,
clothing, art, home hygiene, and fur-
niture renovation will be carried on in
the class rooms.

A play divulging consumer infor-
mation will be enacted in the afternoon,
and a style show will close the formal
program.

Pruning Spring Flower- ing Shrubs

In general, spring flowering shrubs
as soon as they have completed
blooming should be pruned. This ap-
plies particularly to the Forsythia,
Spirea Vanhouttei, and other shrubs
which bloom profusely on new wood.
When plants of this type are through
blooming they should be severely
pruned so that much of the old wood
is removed from the base or crown
as it is sometimes called. This will
encourage the shrub to throw out
long, vigorous shoots of new growth,
which will insure a display of flow-
ers for next spring. It is a far bet-
ter method than any pruning done in
August and September, or February
and March, to keep plants within
bounds, and to remove much of the
flowering buds for the coming sea-
son.

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

MAY, 1937

STUDENT EDITORS

Homemaking Department

Louise Spofford, Danvers	High School Special
Elizabeth Pyburn, Peabody	High School Special
Elizabeth Colby, Newbury	Senior
Yolanda Scamperino, Lawrence	Senior
Lena Tela, Lawrence	Senior

Agricultural Department

Leonard Duratti, Swampscott	Junior
James Keane, Nahant	Senior
Norbert White, Lynn	Senior
Paul St. Linger, Beverly	Senior

GRADUATION DRESSES

In the homemaking department of the school one of the chief concerns at present is the completion of the graduation dresses. Those girls majoring in foods, who have taken the three-year course will wear white crepe or a white hem-stitched material. The clothing majors will also wear white.

The high school specials, those girls who have graduated from high school before entering Essex Aggie, are making dresses of navy blue trimmed with white. The materials used by this group include taffeta, moire, and silk crepe.

Most of the girls are making long sleeved dresses (Commencement exercises begin in November), although a few have chosen patterns with three-quarter length sleeves. Still others are planning short-sleeved dresses with long-sleeved jackets. All the dresses are street length.

Louise Spofford

PRIZE-WINNING CAKE

The following cake won the Grand Award at a contest held recently in So. Byfield by the Camp Fire Girls on their Twenty-fifth birthday. Ruth Graf, a student in the Homemaking department of this School made the prize-winning cake:

Delicious White Cake

Put in a mixing bowl, 1 cup of sugar, 1½ cups sifted flour, into which has been sifted 1 rounding teaspoon baking powder. Into a cup put the whites of 2 eggs. Fill the cup half full of melted butter and add enough sweet milk to fill the cup (the three ingredients making the full cup). Add ½ teaspoon of flavoring. Beat entire mixture in a bowl for 5 minutes.

The egg yolks may be used for the frosting. Beat the yolks until light yellow, add 1 teaspoon butter and enough confectioner's sugar to make the thickness desired. Add ½ teaspoon vanilla. If you want a silhouetted frosting, melt 2 squares of unsweetened chocolate and 2 teaspoons of melted butter. When the frosting is cool pour the melted chocolate over the frosting.

"SUNNY ITALY"

Do you know of any other country that has so many famous old cities as Italy? First of all is Rome. "Imperial" Rome, according to present plans, is to be largely rebuilt and many of the beautiful ancient buildings are to be restored. The city will be modern as well as beautiful. A subway is to be constructed, the excavations for which will tell us more of the life of the people here about the time of Christ.

Farther south is Naples set in a background of olive and orange trees with a beautiful bay in the foreground and Mt. Vesuvius outlined against the sky only a few miles away. Then there is Venice, "Queen of the Adriatic," built on islands with many connecting bridges, where one travels about in boats on canals instead of by street cars or automobiles.

On the other side of the country is Genoa, the birthplace of Columbus, with its many famous old buildings and an Italian Riviera lining the shore on either side of the city. Then there is Milan, Italy's second largest city, with its beautiful cathedral.

Near the western coast farther south, are Pisa with its leaning tower, and Florence, famous art center. Not far away is Bologna, whose university was one of the foremost centers of learning in Europe during the late Middle Ages.

Italy is an especially interesting country to thousands of tourists as well as to multitudes who go there for study. Great numbers of Americans visit it each year and many more go from other countries. Some are attracted by Italy's beautiful scenery. Others go there to see its paintings and statues which make Italy the art center of the world. Still others go there for their interest in its culinary delectations.

The Italian people are largely vegetarians. The first and most important food is olive oil, characteristic of all Mediterranean countries. Olive oil takes the place of butter and lard and is used extensively in all Italian cooking. Ripe olives are also a favorite food, and much of our first imported olive oil comes from Italy.

Chestnuts, many of which are dried and made into meal, are also one of the chief foods of Italy. Have you ever seen the large chestnuts on sale in our markets in the fall and winter? These come from Italy and are used much for stuffing roast turkey and chicken.

The most important cereal in Italy is wheat. The hard wheat raised in the drier parts of the country, is used in making macaroni or spaghetti. Spaghetti, prepared with a sauce and sprinkled with cheese, is a typical Italian dish much relished by those who enjoy Italian cooking.

Italy is a country of many interests, visited annually by thousands.

Lena Tela

More apples are being canned every year. In 1936, seven million bushels went to the grocery shelves as canned apples or apple sauce.

WEEKLY REPORTS

During the past weeks, instructors in the English division have reviewed and graded weekly reports sent in by the students on project. As might be expected, these reports cover a wide range of activities and for the most part are very well done. The following is a report from a Senior for the week ending April 30 and is a fair sample of the many reports received:

"Tuesday I was back on the job and was able to get on with the pruning. Fruit spurs are very easily broken when pruning is done so late in the season.

"Wednesday we separated cockerels, and on Thursday, since it was raining, I spent most of the day inside after spreading 100 pounds of Cyanamid in the peach orchard.

"Friday I got the rest of the Cyanamid spread, and also fertilized the raspberries and grapes with 8-16-16."

Extract from April 24 Report

"Besides the regular routine work with the chickens and around the barn, I found opportunity for more of the belated pruning, though I notice that a neighboring farmer is still at his pruning.

"Monday I uncovered the strawberries and found the plants in fine condition. Mr. B. tells me he is never troubled with frosts. This farm is way up on a hill and only a mile from the highest spot in Essex County.

"I've been reading up on asparagus culture and have found that it takes three years for a bed to bring returns but after that crops may be had for fifteen or twenty years. My project hours for the week ending April 24 totalled 66¼ hours." W. A. '37

BEAUTY HINTS

Beauty, we've been told ('til it hurts) is more than skin deep.

Posture is of course beauty's prime requisite; the posture taught us from the time we were able to direct our own locomotion: heads up, chins in, chests out, and shoulders back.

Hair has ever been woman's crowning glory. Brush it daily. Make it lustrous.

Nails, if properly cared for, are attributes not liabilities. (Biting is not included in proper care.)

Care of skin need not be an arduous task but it is an important one. Soap and warm water are the recommended cleansing agents. An astringent and cold water will close the pores after the cleansing.

Be neat. Be clean. Be alert, and you will have the essential qualities of beauty.

The second 4-H club house on Massachusetts State College campus, financed by donations from club members throughout the state, is now nearing completion, according to George L. Farley, state club leader.

SPRING SALADS

How to Make Them

How to Dress Them

Don't serve lettuce in the same old way. Tempt your family with a variety in salads these spring days, but not fancy, rich party salads. Most people enjoy crisp lettuce with a variety of dressings, especially if the lettuce is served in different ways. Iceburg lettuce adapts itself easily to various methods of serving.

Shredded

To shred lettuce, remove the large green outside leaves, trim, wash and crisp in ice water or in a covered pan in the refrigerator. Then shred into fine, long strips with a sharp knife or scissors. Shake in a dry cloth to remove water before serving.

Rolled

You may wish to roll the leaves with or without a filling. Hold the rolls together with a ring of green pepper or pimento.

Sliced

A large crisp head of lettuce may be cut into slices from $\frac{3}{4}$ to 1 inch thick. Thin slices of lettuce, by the way, make tempting sandwich fillings with meat or cheese or a dressing

French Dressing

2 teaspoons salt 1 teaspoon sugar
 $\frac{1}{4}$ teaspoon cayenne $\frac{1}{2}$ cup vinegar
 1 teaspoon dry mustard
 1 $\frac{1}{2}$ cups olive oil

Put dry ingredients through funnel into bottle. Add vinegar, cover and shake well. Add oil (and garlic if desired) and shake until thick. Keep in refrigerator. Shake thoroughly before using.

Horseradish Dressing

$\frac{1}{2}$ cup salad dressing
 $\frac{1}{4}$ cup cream, whipped
 1 to 2 T grated horseradish
 $\frac{1}{4}$ teaspoon paprika

Chill ingredients and combine just before serving.

How to Care for Lettuce

With proper care, lettuce may be kept in a good refrigerator for several days. As soon as it comes from the store or garden wash, chill in cold water, and store it in the refrigerator until needed.

Helen Lucas

There are two reasons why apples should be eaten whenever possible without being pared. The peel is more than six times as rich in vitamin C as is the flesh near the core. The skin also furnishes desirable bulk in the diet.

SCHOOL FILM

The school now has one 16mm. reel illustrating various farm and school activities. The shots were made by Peer Johnson, sophomore student. Although not in its final form, the film has already been shown to several schools and organizations in the state.

STUDENTS EMPLOYED ON SCHOOL FARM

Each year, students of the School are employed on the 140-acre farm owned and leased by the School. This year the following students are those employed:

Poultry Division

Henry Smith, Saugus

Vegetable Gardening

Albert Greenaway, Marblehead
 Arvid Ljunggren, Saugus
 Horace Luscomb, Hathorne
 Robert Spencer, Danvers
 Edwin Wentworth, Lynn
 John Ylitalo, Danvers

Fruit

Paul Kelley, Lynn
 Lloyd Briscoe, Groveland

Fruit Nursery

Merle Graffam, Lynn
 Paul St. Linger, Beverly

Ornamental Gardening

Robert Corneliusen, Beverly
 Howard Wilson, Jr., Methuen

Greenhouse

John Draper, Peabody
 Aubert Giles, Danvers
 Richard Goodale, Middleton
 Rhea Gosselin, Haverhill

Animal Husbandry

Norman Everett, Lawrence
 David Foss, Essex
 Charles True, Salisbury
 John Zielski, Peabody
 Walter Stacy, Haverhill

HONOR ROLL

Homemaking Department

During the third quarter of the school year the following girls have attained honor roll percentages:

High School Division

Priscilla Hopkins, Beverly
 Louise Minichello, Ipswich
 Elizabeth Pyburn, Peabody
 Ethel Ross, Danvers
 Irene Snell, Beverly
 Barbara Sturtevant, Danvers
 Ruth Tronerud, Topsfield

Senior Division

Barbara Clark, Lynn
 Anna Gioco, N. Andover
 Winifred McKay, Byfield
 Yolanda Scamperino, Lawrence
 Lena Tela, Lawrence

Junior Division

Lilyan Dion, Salem
 Ellen Wills, Ipswich
 Grace Taylor, Salem
 Sophie Stefanowich, N. Andover
 Mary Lafond, N. Andover
 Eleanor Hoelzel, Middleton
 Charlotte Finn, Lawrence
 Marjorie Brown, Beverly
 Esther Boyle, Saugus

Freshman Division

Ada Marsland, Methuen
 Grace Raimey, Methuen
 Edith Skidmore, Lynn

PROJECT NOTES

Raymond Jenkins is doing general farm work on his father's farm, South Cross Rd., Bradford.

John Marshall has a poultry and garden project on the Bradstreet farm in Topsfield.

Many Lawrence students have found employment for the summer season. Coming from the city these young men have an urge to learn the ways of the country. A vocational course at the Agricultural School emphasizes supervised practice work during five or six months of the year. These young men, while furthering their education are also profitably employed. Joseph Bergeron of 89 Bromfield St., Lawrence, is employed on the Greycourt Farm, Methuen, where he is obtaining general dairy farm experience.

Archie Buder, 104 Bowdoin St., Lawrence, is working with Roland Wagner of Ayers Village. Roland is a graduate of this school engaged in the dairy business.

John Crosbie, 23 Butler St., Lawrence, is employed on several estates in the vicinity of Lawrence. His work consists of care of lawns, pruning shrubs and trees, and general garden work.

Norman W. Everett, 42 Kent St., Lawrence, is training in milk plant work at the Essex County Agricultural School. He is gaining experience in pasteurization and the handling and testing of milk.

Francis Gillen, 130 E. Haverhill St., is employed on the Shaw McKean estate at Pride's Crossing, doing general garden and greenhouse work.

Newton Henrickson, 181 High St., will be employed on a 150-acre farm in Meredith, N. H., for the season.

William Long, 206 Abbott St., is employed by A. K. Johnson of Andover, doing general greenhouse and nursery work.

Charles Mahoney, 28 Albion St., is employed in Boxford doing general farm work.

John L. McDonough, 57 Kendall St., is employed on a 50-acre poultry and market garden farm in Georgetown.

Augustine Sheehy, 100 Dorchester St., is employed on a dairy and market garden farm on Andover St., Lowell.

Gerard Hamel, 324 S. Union St., is employed on the Andrews Farm in W. Boxford.

A TOMATO RECIPE

Japanese Relish

2 cups canned tomato
 2 cups chopped apple
 1 lemon put through food chopper
 4 T chopped crystallized ginger
 3 cups sugar

Cook all ingredients except sugar together for 5 minutes. Add sugar and cook until thick. Ginger may be omitted.

The County Agent Says

Enrollment in the Conservation program in Essex County during 1937 increased 477 per cent over 1936. Last year there were 109 Federal Government payments. To date, in 1937, there are 600 enrollments. Thirty-five of them are forestry projects. Two are cranberry practices.

Spraying Latham raspberries to control anthracnose not only increased the yield but practically eliminated all signs of cold injury in the U. S. during the winter of 1934-35.

Conrad Tronerud of Topsfield is interested in making a comparison between the results of broadcasting fertilizer before sweet corn is seeded and applying it as a side dressing at the time of seeding.

The Argilla Farm, Ipswich, Cherry Hill Farm, Beverly, and Wilfred Martel of Ipswich have tests comparing the amounts of potash needed for alfalfa. It has been concluded that 600 pounds of muriate of potash per acre does the trick.

Spray bulletins are being broadcast over WBZ at 6.40 A. M. and 1.10 P. M. daylight saving time.

On Monday, May 10, E. J. Rowell, Station announcer for the Farm and Home Hour over WBZ, inaugurated the year's announcement of weather forecasts 60 hours in advance. Many an orchard has profited by these forecasts and many a hay field was saved last year by the wise farmer who listened to these special, long-range forecasts.

Spray charts for vegetables, cherries, plums, peaches, grapes and apples, may be obtained through the County Agent F. C. Smith, Hathorne.

Students Honored

The faculty committee on student activities is pleased to announce that the following students have been awarded the old English "E" for student activities and loyalty during the year 1936-1937:

Walter Alley, Lynn; Joseph Arnold, Gloucester; Bruce Bowden, Salisbury; Joseph Blunda, Ipswich; William Corning, Beverly; Percy Curtis, Rockport; Paul Day, Saugus; Norman Everett, Lawrence; Gilbert Freeman, Beverly; Donald Gasper, Beverly; Francis Gillen, Lawrence; Rhea Gosselin, Haverhill; Merle Graffman, Lynn; Walter Hichens, Middleton; Carroll Killillae, Nahant; John Kune, Amesbury; William Long, Lawrence; Leroy MacAloney, Groveland; Archie Nimmo, Methuen; Norman Peatman, Andover; Jacob Ranta, Rockport; Gildo Santin, Beverly; Henry and Theodore Smolak, North Andover; Clayton Teague, Marblehead; Allyn Trask, Peabody; Warren Towne, Beverly; Philip Webber, Middleton; Russell Weinhold, Methuen; Norbert White, Ipswich.

Ant Extermination

Ants are frequently admired for their industry and in the next breath condemned for turning the pantry and lawn into a happy hunting ground. The only sure, effective way of exterminating these pests is relatively simple: find the holes leading to their underground homes and gas them out with carbon bisulphide. This material is inexpensive and, when used efficiently, one treatment is usually sufficient.

The best way to get the fumes of the liquid into the nests is to make small holes, eight to ten inches deep and six to eight inches apart in the infested area. Into each opening pour one tablespoon of carbon bisulphide and cover it immediately with soil. The gas, being heavier than air, will replace it in the tunnels occupied by the ants, thus effecting a quick death. Special precautions must be taken while working with this material as it is highly inflammable. Avoid close contact with a lighted match, cigarette, pipe or cigar.

When purchasing this chemical, ask for the common "technical" grade. It is just as efficient and much less expensive than the chemically pure grade.

If the homemaker is unable to locate the nest of the ants foraging for food in her pantry, the pests may be trapped or poisoned in the house. Sodium Fluoride (poisonous to children) may be dusted liberally in the areas where ants congregate and especially in the vicinity of the place where they enter the house. If small children are in the house, pyrethrum powder should be substituted for Sodium Fluoride. It is non-poisonous, though nauseating, to children.

Ants may also be trapped in receptacles of sweetened water and destroyed with fire. Repellants such as borax do not give satisfactory results.

King Potato Grower

Roy Thomas has a report in "Better Crops" about Frank Shaw, Presque Isle, Maine, who produced 701 bushels of potatoes per acre in 1936. The latter mentioned a number of factors relevant to his success:

1. Deep plowing—9 to 11 inches.
2. Liberal amounts of seed (Cut seed to 2 ounces).
3. Ample fertilizing—1300 lbs. of 8-16-20 fertilizer per acre.
4. Cultivation—Control weeds, but cultivate shallowly. Keep away from feeder roots.
5. Spraying—Liquid Bordeaux 10-10-100 strength. Start when plants are but 6" tall. Spray continuously, 200 pounds pressure. Increase, later in summer, to 350 pounds pressure.

Garden Chat

Plant Nutrition

Plant food may be added to the soil through animal manures, green manures, crop residue, fertilizers and lime. From some thirty (30) odd different food elements that plants use, twelve (12) are most important: carbon, hydrogen, oxygen, nitrogen, phosphorus, potash, calcium, iron, magnesium, boron, manganese, and sulphur. The first three named elements are taken by the plants through air and water. The three most important elements are nitrogen (N), phosphorus (P) and potash (K), and these are usually deficient in most of our soils.

1. Nitrogen makes for vegetative growth.
2. Potash strengthens all walls of leaves and stems.
3. Potash strengthens stem development and gives color.
4. Calcium strengthens all walls of leaves and stems.
5. Magnesium aids in manufacture of chlorophyll, fats, oils and starches.
6. Sulphur aids in protein formation and plant growth.
7. Iron is essential for chlorophyll formation.
8. Boron is used to develop root systems.

All plants do not remove the same food elements from the soil. All food applied to the soil is not available due to certain chemical changes taking place. Some food may be leached out.

Factors to be considered when fertilizers are applied to the soil are:

1. The condition of the soil—organic content, heavy or light, deep or shallow rooted crops to be grown; irrigated or not, etc.
2. Type of crop to be grown.
3. Weather.
4. Cost.
5. Materials to be used—availability.
6. Method of application,—broadcasting, side dressing.
7. Time of application depends on crop growing, source of water, and kind used.

C. M. Stearns

Latest Move To Increase Timberland

Congress has just passed a bill providing for the cooperation of the United States Department of Agriculture with farmers, State Colleges, and Experiment Stations, in developing forest tree seedlings. Such seedlings will be grown free for farmers by the U. S. D. A., and will be furnished free to farmers who agree to follow modern and approved methods of forestry management.

Round About the County

May 12

Mrs. Ruth D. Morley, Child Specialist, conducted a leaders' meeting on the subject of parental education on May 12. The following women, who will conduct classes in their own communities, were present:

Mrs. N. L. Beachner, Clifton; Mrs. Fred C. Bailey and Mrs. Harold Knapp, Newburyport; Mrs. E. Robert Little and Mrs. Lawrence Bond, Boxford; Miss Clara M. Kearney, Swampscott; Mrs. R. U. Silvernail and Mrs. Warren Osborne, Middleton.

June

Arnold M. Davis, horticulturist from the Massachusetts State College, who needs no introduction to Essex County gardeners, will hold meetings in Groveland and West Boxford during the month of June. For dates of these meetings, please communicate with Mrs. Mary M. McIntire, Home Demonstration Agent, Hathorne. (Telephone, Danvers 50).

Walter A. MacInn, a graduate of the Massachusetts State College and who has done advanced work at Oregon State and Massachusetts State Colleges, will assist William R. Cole, extension specialist in horticultural manufactures, in the food preservation program scheduled for Essex County during the next four months.

Mrs. Mary M. McIntire will attend training conferences at the Massachusetts State College in June under the supervision of Mrs. Harriett J. Haynes, Extension Economist and instructor of furniture renovation.

Mrs. McIntire and Mrs. Vera Underhill, Assistant 4-H Club Agent in Essex County, will attend the interstate conference of Extension workers at Straitsmouth Inn, Rockport, from June 12 to June 15.

Make Tomatoes a Habit

"Make tomatoes a habit if you would be hale, hearty, and healthy," advises Miss May E. Foley, extension nutritionist at the Massachusetts State College. "Few foods which are good for us are as good to eat and look upon as tomatoes. There is no vegetable so generally liked, nor is there one which can be used in such a variety of ways.

A few tomato plants in the back yard give a surprising yield with little cost and work. A space 12 by 12 feet, the size of a small room, will supply an average family with fresh tomatoes every day during the growing season and give a surplus for canning.

Free copies of the leaflet, "Make Tomatoes a Habit," may be obtained by writing to the Mailing Room, M. S. C., Amherst, Mass.



4 - H CLUB NEWS



County 4-H Contest Day

Essex County 4-H Club girls held sway at this School all day, Saturday, May 22. It was the annual 4-H contest day, winding up the work done during the year. It was an exciting one as the girls exhibited their handiwork.

Clothing was judged by Mrs. Walter Snell of Lynn, Mrs. Mary M. McIntire, Home Demonstration Agent in Essex County, and Mrs. Myrtle Dunn, clothing instructor at this School. Mrs. Alic Albrecht supervised the Dress Revue, a feature of the afternoon program. Following the style show, moving pictures were shown by the Coca Cola Company.

The following contestants were chosen to compete in the State Home Economics Contest to be held Saturday, June 5, at Amherst:

Clothing Contestants: Doris Albrecht, N. Andover; Marilyn Lewis, Andover; Marguerite Shevenell, Groveland; Elizabeth Eastman, Andover; Dorothy Troubetaris, Beverly.

Foods Contestants: Dorothy McDonough, Beverly; Gloria Amiri, Gloucester.

Home Furnishing Exhibitors: Marion Peatman, Ballardvale; Patricia Perry, Ballardvale.

Poster Exhibitor: Dorothy McDonough, Beverly.

Foods Scrapbooks: Dorothy McDonough, Beverly; Hester Zeeman, Gloucester.

Music Memory Contest

The music memory contest will be held on Saturday, June 12. As this is also the date for the County 4-H Club Field Day, which is to be held here at this School, we are planning to arrange that all who wish to may take part.

Those receiving 100% in this contest will have a chance to try out for the trip to State Camp.

Canning Meeting

Professor William Cole, canning specialist, will give a canning demonstration in Lynn on June 15. Mrs. Alexander Bissett, who is our 4-H canning leader, will be in charge of the meeting. Anyone interested is welcome to attend the meeting.

All canning leaflets are now ready for distribution. Leaders, please send in the requests for the numbers you will require.

Groveland Girl Awarded Book

Many local exhibits have been shown in the county this year, with some very outstanding work. At the Groveland exhibit we have one record which deserves special mention.

Evelyn Thurlow was presented a book on 4-H club work for completing six years' perfect attendance at club meetings. In addition to her club achievements she has a very high scholastic record, the second highest on the honor roll, and is to give an honor essay on 4-H club work at the graduation exercises.

It's Spring

Let's join a 4-H canning club. There is a feeling at Spring that seizes us all; urges us to do things.

There is satisfaction (and a great deal of it) in canning fresh fruits and vegetables from your own gardens, and a joy in having your store room shelves filled with these products for long winter's use.

Fairs and contests will give you opportunities for earning money through canning.

Why not make this summer's club work profitable and worth while?

New Canning Program For Summer Clubs

A new project has been offered to club members not able to do a large amount of canning:

1. Can at least 6 fruits and vegetables.
2. Prepare 2 meals at home, using fresh vegetables.
3. Pack a picnic lunch or cook a meal out of doors.
4. Make a gift of a canned product.
5. Exhibit at a local Fair.

If you are interested in this project kindly communicate with Mrs. Underhill, assistant Club Agent, Hathorne.

Care of Climbing Roses

Climbing roses should be prepared for their period of productivity by first applying plant food. For this there is nothing better than a couple of shovelfuls of old barnyard manure worked into the soil lightly around the plant.

Second, the bushes should be tied up until they are well supported and when they get ready to bloom will be in a position to bloom without being abused by the wind.

Third, all dead wood which has turned black, as a result of the winter, should be removed by pruning.

ESSEX FARMER AND HOME MAKER

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NO. 6

The New Athletic Field

Work is progressing in an excellent manner on the new Athletic Field. Already the oval inside the track, which will be used as a football and baseball field, has been carefully graded and seeded. The cinder track, one-fifth mile in extent with a straightaway of approximately 450 feet, is also outlined and is being filled rapidly with cinders after being given proper drainage. Considerable permanent planting has been done around the field and is already showing excellent results.

The many visitors who are already looking over the field are nearly as enthusiastic over it as are those who are regularly working on it.

What Is Rotenone?

Chemical rotenone is a white crystalline substance and is found in largest quantities in the roots of woody plants of the derris genus. It is comparable to the nicotine in tobacco.

All rotenone for insecticide purposes is now imported into the United States. When grown for commerce the plants are propagated from cuttings and after two years the roots are dug, air dried, and baled.

The active ingredients of derris were originally known as fish poisons and were used as such by the Indians. The poisoned fish were eaten with no ill effects and it was thus discovered that the rotenone was poisonous to cold-blooded animals but relatively harmless to humans and warm-blooded animals.

For spraying, rotenone is emulsified in a liquid. The sprays will kill worms, moths, and beetles as well as plant lice, and at the greatest concentration give very good control of red spider.

On vegetables, dust is preferred, being more easily applied. A home-made dust can be prepared by mixing 15 parts of powdered derris with 85 parts of inert clay. Commercially prepared dusts should contain at least .5 per cent ($\frac{1}{2}$ of 1 percent) rotenone, and most commercial dusts contain .75 to 1.0 per cent rotenone.

Rotenone and other active ingredients of derris and cube are broken down by light and, therefore, are effective only 4 or 5 days after application. If continuous protection is necessary, they should be applied at least each week, or more often if washed off by heavy rains.

Extracts from an article by
W. D. Whitcomb of the
Waltham Field Station

Value of Catskill Strawberry Becoming Firmly Established

School Proud of Part it Has Played in Contributing This Desirable Fruit to the County

The authorities at the School feel very proud of the part which has been done in establishing the value of the Catskill strawberry. The variety originated at the New York State Agricultural Experiment Station at Geneva, and on a very early test here proved most satisfactory.

In August, 1934, we remarked as follows:

"Even in the unquestionably poor fruiting year, the Catskill strawberry (formerly Geneva 4435) has given such a good account of itself that there is a keen increasing demand for plants. The authorities here at the Agricultural School are going to attempt to follow up the sources of

available plants. At the present time a fair stock of potted plants is now available and plants will be offered by many growers at the usual spring planting time."

At the present time our rating of the berry is as high or higher than then since it is proving to be a most satisfactory berry for growth and yield under a variety of soil and climatic conditions. The berry is being introduced into fruit farms and home gardens more widely at the present time than any other strawberry variety. Many nurserymen are quite unable to keep up with the demand for plants.

New Fruit and Veget- able Grading Law In Effect

A law providing that fruit and vegetables shipped into New York State for sale must be graded, packed and marked in accordance with United States Grades and Standards went into effect June 1. Rigid enforcement of the new law will be delayed during the first two months of its operation to give opportunity for adjustments in practice.

On August 1, and thereafter, any Massachusetts farmer who sends products to New York State not properly graded will run the risk of having his products barred from market.

In order to protect Massachusetts farmers from loss because of failure to understand the New York law, the State Department of Agriculture is preparing a statement of the United States Grades and Standards which will be used as a basis for enforcement of the New York law. Copies of this summary will be mailed on request.

Augment the Yield of Crops

The Insect and Disease fight is on. Sometimes we tend to put off the control of these pests until they have done considerable damage. In spite of this the plant may live but instead of a plant that will give good production we have one impaired by insect and disease damage until it is only a third as efficient as it should be, and the crop only a fraction of what it would normally be.

A leaf may be likened to a factory where plant food is manufactured. The leaf punched with holes and partly chewed, or one whose chlorophyll (green coloring matter) has been sucked out, is not in a good condition to supply maximum production.

A careful watch of our plants from day to day will pay us large dividends in the end. When insects and disease once obtain a foothold it is no easy task to overcome the damage done by them. Protect the plants by following a spray schedule. Send to the Essex County Agricultural School, Hathorne, for a spray chart.

A. G. Perkins

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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Association
Secretary, R. H. Campbell Topsfield

Calendar

June 25—Homemaking Department
of this School closes for summer.
June 29 and 30—Professor William
R. Cole of the Massachusetts
State College will give canning
instruction in West Haverhill.
July 8, 9, and 18—Professor Cole
in Lawrence.
July 27-30—Farm and Home Week,
Massachusetts State College.
August 2-4—Conference of Vocational
Agricultural Directors and
Instructors at this School.
August 4—Field Day at the Walt-
ham Field Station.

Cucumber Boat Salad

3 cucumbers
2 tomatoes
1-2 cup chopped celery
1 teaspoon salt
1-8 teaspoon pepper
1 tablespoon chopped onion

Peel the chilled cucumbers. Cut
cucumbers in halves, lengthwise, re-
moving pulp from centers. Peel to-
matoes, cut in cubes and drain off
juice. Mix cucumber pulp, tomatoes,
celery, salt, pepper, and onions and
moisten with mayonnaise. Fill cucum-
ber halves with this mixture and ar-
range on crisp lettuce or romaine
leaves. Garnish with parsley

A China Closet Reverie

Summer is here and many of you
are closing your china closets, not to
reopen them until September. Before
that last closing take another peek
that you may really know what de-
signs are on the dishes. I hope they
are all romantic stock patterns and
not just a common passing fancy.

You may have a set of breakfast
dishes bearing the Onion pattern.
History tells us that the first onions
were probably grown in India and
Egypt but the Chinese first painted
the onion on a porcelain dish. A copy
was carried from China to Germany
where it was carefully imitated by
the Meissen (Royal Dresden) factory.
That original dish may still be seen
in the Museum in Dresden. When you
were at boarding school perhaps that
was the pattern which faced you three
times a day. Or when you were a
sick infant and your parents were at
the point of giving up the fight for
your life, a thoughtful old lady came
hurriedly to your home with an onion
poultice for your chest. The applica-
tion apparently saved your life, hence
the onion is sacred to you today. How
happily you gaze at this set of dish-
es.

On the next shelf is a set of Blue
Willow. At once your mind goes back
to that Fifth Grade Reader from
which you first read the Chinese story
of the Mandarin's daughter falling in
love with the father's secretary; their
flight to the beautiful isle where in-
stead of being killed by the angry
father, were turned into two lovely
turtle-doves by a kindly power. At
that time you planned to buy Blue
Willow ware when you had a home
because you were so charmed with
the story. It is interesting to know
the earliest Willow pattern was made
in 1780 in the pottery of Thomas
Turner at Caughley.

The Blue Dragon Tea Set, which a
dear friend gave you as a house-
warming gift comes next into view.
You have never heard an interesting
Japanese story connected with this
pattern but you do enjoy the graceful
curves.

The Blue Spode's Tower dinner set,
which you always saw at Grandfa-
ther's house, and never dreamed
would eventually find its way into
your closet, is staring at you. Know-
ing that at the close of the eighteenth
century Josiah Spode produced a bet-
ter porcelain than any that had been
heretofore made in England, is pleas-
ing. Staffordshire potteries became
very exclusive and at one time ob-
jected to clay and natural products
coming under patents. The Law was
invoked, the case went to the House
of Lords, a sleepy judge with wise
pronouncement told the Staffordshire
potters "to go home and make their
damned pots", which they did and
have done successfully ever since.
The old firm of Spode, as the ledgers
show, sent earthenware to Boston to
grace colonial tables, as did the tea

A New Loop-Petal Flower

This summer's fashion fancy is
the use of more and bigger flowers.
It is a good and easy way to change
the appearance of a dress. Wear them
on your shoulder or at the point of
a V neckline.

Here is a new one, large enough
for Fashion's fancy. Make it of pique,
linen, organdy, or mousseline. If you
choose white, add a touch of color
contrast in the stamens.

Directions and measurements for
the flowers:

Cut a bias strip of fabric 1½ in-
ches wide and 63 inches long for each
of three flowers (there should be
three flowers if they're to be effective).
Plain-roll the edges of the bias
strip when using organdy or mous-
seline. With pique or linen, moisten
the edges with library paste as you
roll, to make the rolling easier and
to keep the edge firm afterwards.
Now make a narrow tubing of the
fabric 78 inches for a bunch of three
blossoms. Fold the bias rolled strip
in loops 3½ inches long. Fasten 9
loops around one-third of the sta-
mens. Wrap a piece of narrow tubing
around the raw edges and leave 9
inches of the tubing hanging down
for a stem. Make the second and
third flowers in the same way, then
take a bunch of long loops of the
tubing, fasten then to the three
flower stems, and they will resemble
a single flower.

Myrtle Dunn,
Instructor in Clothing

Plants Poisonous To Livestock

Although Essex County does not
have so large a number of different
poisonous plants as found in many
other localities, it is well to learn
what plants are dangerous and may
cause trouble in pastures.

Leaves of wild and choke cherry,
if in the wilted state, contain prussic
acid, a quick-acting poison.

Sheep laurel, another common plant
growing on hillsides, contains poison
but it is usually avoided by stock.
When animals are turned on pasture
in the spring, this plant may be eat-
en.

Water hemlock and Bracken fern
are two added trouble makers.

Supply clean, fresh water and do
not overgraze the pasture if you will
eliminate trouble from poisonous
plants.

Roy L. Fleming

merchants whose cargoes were thrown
overboard in Boston Harbor in 1773.

With these fond memories you close
the closet door.

Harriet Butman,
Instructor in Household Arts

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

JUNE, 1937

Student Editors

Homemaking Department

Louise Spofford, Danvers
High School Special
Elizabeth Pyburn, Peabody
High School Special
Elizabeth Colby, Newbury Senior
Yolanda Scamperino, Lawrence Senior
Lena Tela, Lawrence Senior

Agricultural Department

Leonard Duratti, Swampscott Junior
James Keane, Nahant Senior
Norbert White, Lynn Senior
Paul St. Linger, Beverly Senior

Parents' Day

Parents and friends of the Homemaking Department were invited to visit the Essex County Agricultural School on June 23 for its annual Parents' Day. The program included a gymnastics exhibit, educational exhibits of various types, demonstrations of school work, a fashion parade, speaker, and a social hour.

There was a gym exhibit at eleven o'clock under the direction of Mrs. Beatrice Couhig, athletic instructor. Between twelve and two o'clock box lunches were eaten on the School campus.

During this two hour lunch period there were demonstrations in various class rooms in the Homemaking Department. The clothing division demonstrated smocking and various ways of using bias cording. Miss Harris had articles in handcraft made for exhibit, and some of her girls gave personal color readings. There were also on exhibit in Miss Harris' room, color harmonies, room arrangements, and curtains. In the foods department, girls decorated cakes under the direction of Miss Emerson. The different processes of renovating furniture were shown by Mrs. Butman's girls. In the library, Miss Clarke had on exhibition new books on foods, costume design, travel and biography. Also there were book reviews, charts on newspaper and magazine readings and a newspaper project that was carried out by the Freshman class in citizenship.

The afternoon program began at two o'clock, when a playlet, "Bridal Blankets," was directed by Miss Lovett. A fashion parade followed. This parade was sponsored by the clothing department.

Mrs. Marion Rudkin of Beverly, the speaker of the afternoon chose for her topic, "The Forward Step." A social hour followed the speaker and closed the program.

E. P.

Exhibit of Japanese Prints

The Shima Art Company of New York recently loaned an exhibit of imported Japanese prints to the Homemaking Department of this School. It consisted of about one hundred and fifty prints.

The method of making them was interesting to the students, especially since many of them have made block prints in their art classes. An artist first outlines a design with the point of a brush on thin paper. The print is then pasted face downward on a flat block of wood, usually cherry. The paper is carefully scraped on the back until the design shows through distinctly. Next the wood is carefully cut away, leaving the lines which were painted on. A number of impressions are then taken in Chinese ink from this key block and handed to an artist to be filled in with color. The engraver makes a number of these prints leaving different parts raised. Then they are colored with vegetable dyes. The printing is done on moist paper with Chinese ink and color applied to the blocks with flat brushes. A little rice paste is usually mixed with the pigments to keep them from running, and to increase their brightness. Sometimes some prints are better than others.

In printing, a sheet of mulberry or rice paper is laid upon the block and the printer rubs off the impression with a kind of pad, and uses a circular motion of the hand. By varying the degree of pressure the color can be forced deep into the paper or left on the outer fibers of the paper. Sometimes it takes forty blocks to make one print.

The prints exhibited, included Japanese scenes, birds, and flowers.

Kathleen Hanson

Lettuce and Watercress Salad

A cool, refreshing summer salad may be made by combining two fresh, crisp salad greens, lettuce and watercress.

Separate lettuce leaves. Use watercress sprays on a bed of outside, chopped lettuce leaves or chop the cress and serve inside the small hearts of lettuce.

Garnish with thinly sliced cucumbers and radish roses.

Serve with French dressing.

L. S.

Foods Demonstration Unit

During the last semester, Mrs. Butman, a foods teacher in the Homemaking Department, organized an interesting unit in her Foods Theory class. Each student presented, in the class room, a demonstration of food preparation. There were many factors for each girl to consider before giving her demonstration. It was her duty to:

1. Decide on her topic and acquaint herself with the subject matter.
2. Try out her recipe before the demonstration.
3. Have all materials ready.
4. Be careful of personal appearance.
5. Get the attention of her audience by giving a snappy introduction.
6. State the purpose or object of her demonstration.
7. Show a lively interest in what she was demonstrating.
8. Speak slowly.
9. Avoid a too scientific explanation.
10. Present carefully, her demonstration.

At the end of her demonstration she—

1. Asked her audience if they had any questions.
2. Invited the inspection of the finished product.
3. Answered honestly the questions asked.

The demonstrations presented included the preparation of vegetables, salads, mayonnaise, muffins, baking powder biscuits, pastry, buttercake, sponge cake, desserts and cookies.

Presentations of this sort afforded the students an opportunity to gain poise in speaking before the public.

Mary Lafond

Alumni Notes

Louise Semple of Newburyport, is working at the Danvers State Hospital as assistant housekeeper.

Sylvia Smith, '36, of Rockport, has entered the Massachusetts Memorial Hospital to train for a nurse.

Pauline Buxton, '36, of Salem, is taking a three-year course of study at the School of Occupational Therapy in Boston.

Elizabeth Poland, '36, of Newburyport, is going to the Chandler Secretarial School in Boston.

Henrietta Stockley, '36, of Peabody, is training for a nurse at the J. B. Thomas Hospital in Peabody.

Flower Arrangement

Mrs. Elise Cutler of Gloucester gave a most interesting lecture and demonstration of flower arrangements to the Echo Club on Friday, June 4. She stressed particularly the importance, in arranging flowers in a bowl or vase, of crossing the stems so that each blossom will stand out individually. She demonstrated several different kinds of arrangements using various shaped bowls and vases of different colors.

Mrs. Cutler used both garden and hot-house flowers including lupine, iris, bachelor buttons, pansies, bridal wreath, French marigolds, carnations, roses, and sweet peas. By mixing hot-house and garden flowers she had many beautiful flower arrangements. She demonstrated several different types of holders and suggested using dried moss or asparagus fern to hold the flowers in place if holders were unavailable.

Probably the most interesting part of her talk was the demonstration of the making of corsages. She explained that different types of people require different kinds of corsages. In constructing them she wound the stems of the flowers with para-film to prevent the stems soiling the evening dresses. The first corsage she made was an old-fashioned type made of bachelor buttons and marguerites, to be worn on the shoulder by a person of medium build. The corsage of roses was a medallion type especially suited to a tall person. She demonstrated how a very attractive corsage may be made by using black tulle and white flowers. Her double-ended corsage of sweet peas was especially attractive. She made one corsage using carnations. In this she did not use the whole blossom but divided the flower into small parts, making her corsage a little unusual and different from the ordinary type.

Wrapped in cellophane of different colors the corsages and bouquets made most attractive packages for delivery.

Louise Spofford

Spring Curriculum

During the last quarter of the school year, the Junior girls have received instruction in gardening. They have kept garden diaries as a part of their work, including memoranda of the things one sees daily in the garden.

Another exciting form of garden work was undertaken. The girls brought to school various bowls, pie plates and odd dishes in which they made miniature gardens depicting woodland scenes. Small lakes and rivers entered into these gardens by means of little pieces of broken glass.

Mr. White, the instructor, guided the juniors in making a fascinating exhibit for Parents' Day.

Charlotte Finn

Weekly Reports

Excerpts from weekly reports of students on summer projects tend to show wherein lie the benefits of their training.

"I have gained a working knowledge of the drainage problem as it pertains to the athletic field, especially the track part of it. My work for this week has consisted largely of making the drainage ditch and laying the land tile in it. This is to take care of all water which may accumulate in the track." Merle Graf-ram.

"My work has consisted of regular chores: watering and feeding of layers and chickens on the range; collecting, cleaning, grading, candling, and packing eggs; and keeping the grounds and building in proper condition."

Henry Smith.

Monday, June 7: "I cultivated and weeded the cold frame. I cleaned around the outside of the frame. Then I dug a ditch about a foot deep, put in a load of manure and then put on about six inches of soil. I planted Anise seed and covered it over with loam. This seed resembles carrot seed only it is much larger. I then dug thirty-one holes into which woodvines in 10-inch pots were put. Then I sunk two posts at either end of the line, strung a wire from one to the other and tied up the plants with raffia. I hoed around peach trees and also burned brush and dug strawberry plants." Paul St. Linger.

May 11: "This week, John, Rick and I moved all the seedlings from the greenhouse to the cold frames. Many of the flats full of seedlings have begun to turn yellow. This is due to the cramped root condition. The Memorial Day rush is over and we are now turning our attention to the cut flower garden and the big border. This week I learned one way to get rid of mealy bugs. Make a mixture of lemon oil and water and dip the plants in it. The mealy bug will drop off." Aubert Giles.

May 16: "Like the pioneers of old we started work today in the field. The land has not been planted for the past fifteen years. The soil is matted with deeply rooted turf. We frequently encounter clumps of blackberry roots and grape vines with roots twelve feet long. At one end of the garden we are making a compost pile. We work on relays grubbing, spading, wheeling compost, and planting. Today we set out *agratum* and *calendula* seedlings. . . . I am now permitted to do all the watering in the greenhouse and frames. I enjoy it very much and cannot understand why everyone around here dislikes the job. It requires about four hours to water the six houses and five frames. Unless I have some help I am busy watering all the morning. I have learned several things while watering. Among them are not to wet the flowers, fill every dry pot with

New Foods Work

The Junior girls have just completed a new unit in Foods work. Each girl in the class acted, in turn, as kitchen manager in the student cafeteria, working with a partner who shared the responsibility.

The two girls who were in charge of the kitchen planned the menu for the day's luncheon. By referring to progress charts and cards the managers determined the kind of work each girl in the class was to do. They tried to give assignments which had not previously been done by the students or at least would not be repeated within a few lessons.

The managers were quite successful. Everything ran smoothly. The instructor was approached only when it was absolutely necessary. This was good training for the girls as it taught them what responsibility really is.

The students of the class as a whole gave full cooperation. They did not complain and they tried to help each other. Each girl knew that when her turn came she would get some new and worthwhile experience.

Grace Taylor

The Coronation

The classes having history and economics started an interesting newspaper unit by following the fascinating history of England's famous coronations. The topic of interest was the coronation of George VI, and was combined with the former coronations and their history.

Miss Clarke gave her students assignments for research during spring vacation. Many newspapers featuring pictures of the coronation, the order of ceremony, and the history of the Windsor family, gave useful and interesting information.

The students agreed that class discussions of the coronation made it a real and living event.

Probably there will not be another coronation for a long time but this generation will always remember the crowning of George VI.

E. Bettencourt

Egg and Anchovy Salad

6 hard cooked eggs
2 tablespoons celery (finely chopped)
1-4 teaspoon paprika
15 anchovies

Remove egg yolks and mix with celery, paprika and enough mayonnaise to moisten. Mash three or four anchovies and combine with egg yolk mixture. Refill whites, using pastry bag and arrange two halves on watercress or shredded lettuce. Put an anchovy on top each half. Serve with French dressing.

water and spray the foliage of carnations to help control red spider.
Leonard Duratti.

Soil Type Important

Practical cattlemen of many years experience made soil surveys and classified them long before soil scientists ever began a systematic study of the problem. The only difference in their methods was that soil scientists classified soils on their physical and chemical characteristics, whereas the farmers classified them not only on their ability to produce volume of crops but on the nutritional value.

Farms were judged by their ability to produce abundant fodder of various kinds, as they would grow and fatten cattle exceptionally well. A recent report indicates two types of soil on which specified crops have thrived and failed to thrive.

Timothy grew well on soil containing 9.59 percent ash, 1.03 percent nitrogen, .167 percent potash, and .412 percent lime. It did poorly on soil containing 5.04 percent ash, 1.04 percent nitrogen, .106 percent potash, and .340 percent lime.

Red Top thrived on 9.14 percent ash, 1.27 percent nitrogen, .183 percent potash, and .468 percent lime. It failed to thrive on 8.73 percent ash, 1.01 percent nitrogen, .103 percent potash and .329 percent lime.

Red Clover grew successfully on 7.02 percent ash, 2.62 percent nitrogen, .199 percent potash, and 2.31 percent lime.

Leaving a Little Milk Not Bad For Cows

"Stripping" is one chore that the dairyman short of help may omit. It has been a common belief that lack of proper "stripping" would cause the cows to go dry more rapidly, lower the butterfat percentage of the milk, and possibly affect the health of the cow.

If the farmer has plenty of time and is short of milk then he should get the "last drop". But if he is short of help he may omit stripping without harm to the cow. Ordinarily enough additional milk will be obtained to pay for the labor of stripping.

Annual Flowers May Be Started Now

It is still not too late to start annual flowers if none have been started to date. For example, petunia sown even now will be in full bloom long before the growing season is over and may even be more effective later in the year than the same plants would be if they had been started earlier and had reached their peak of blooming and were beginning to wane. This applies to many of the garden flowers, that is, the starting of annuals which are just coming in to their best at the fall of the year is very beneficial in giving your garden that well-groomed and well-managed effect which is so desired.

Gully Control Varies With Local Conditions

Farmers keep in mind economy, effectiveness, and permanence when they build soil-saving check dams, earth fills or diversion ditches to control gullies. Check dams of straw, poles and logs, woven wire, and loose rock serve their purpose well although they do not last as well as dams of well-laid rock, masonry, or concrete and earth.

Gullies waste millions of tons of valuable soil every year. Soil Conservation Service men on more than 140 demonstrations areas are showing farmers how gullies can be prevented and checked. Control varies because climate, soils, and cropping methods vary in different parts of the country, but farmers will find one or more of three methods effective.

In practically all sections of the country gully sides may be planted to grass, shrubbery, or trees. Once established, the vegetation slows the flow of "little waters" after rains and holds the soil. Choice of grasses, trees, or shrubs for such plantings is a question which may be referred to county agents or SCS specialists on demonstration areas.

When gullies drain a fair-sized watershed, run-off can be retarded by the right crops and contour farming. Terraces or diversion ditches take care of excess run-off.

Where the volume of run-off is high, earth, masonry, or concrete dams may be necessary. These dams are most effective where a gully slope is comparatively gentle and where they can be high enough to prevent further cutting back of the gully head. These dams also create reservoirs for livestock water and irrigation.

Farm and Home Week July 27-30

The 19th annual Farm and Home Week at Massachusetts State College has been scheduled for July 27-30. With a greater variety of programs this year than ever before, the college hopes to establish a new attendance record at this popular event.

Lectures, discussions, exhibits, and demonstrations have been arranged for 17 different interest-groups. These include homemakers, leaders of community organizations, flower garden enthusiasts, nurserymen, commercial vegetable growers, dairymen and general farmers, food preservationists, woodlot owners, feed dealers, fruit growers, poultrymen, lawn owners, beekeepers, taxation specialists, Farm Bureau women, Parent-Teacher Association members and Grange members.

Garden Chat

Who said bugs! If you don't watch out, they'll have all your vegetable crops this year.

Mexican bean beetles are appearing very early on the bean plants with egg clusters noted before the 5th of June.

Cuke beetles are feeding on the cucumber and squash vines in good shape. Both of these insects can be controlled by using Rotenone dust, keeping foliage covered well. Apply in early forenoon.

Flea beetles have been working overtime on the tomato and potato foliage. These little black beetles, the size of the head of a pin, can be controlled by spraying or dusting with lead or calcium arsenate. All the above treatments should be repeated after each rain to secure best results.

The leaf vegetables are growing exceptionally well with the frequent rains that have fallen the past four or five weeks. This would indicate that late crops will probably suffer some from the lack of nitrogen, and for the late crops, an application of sodium nitrate during a shower, along the first to the middle of August, would do much in increasing the yields.

C. M. Stearns

Flushing Bar Warns Birds

Because farm operations like harvesting grain and mowing hay often destroy nests of quail and other game birds, many farmers are using a flushing bar, reports the United States Department of Agriculture. The bar usually is a bamboo pole fastened to the neck yoke and extending in front of the sickle.

Strips of lightly weighted burlap attached to the pole drag through the grass or grain, flush the birds and locate the nests, over which the farmer can lift the sickle bar. Binders cutting high usually leave the nest undisturbed. Many farmers furnish food and cover to birds by leaving corners and odd spots in a field uncut.

Descriptions of flushing bars and other means of favoring wildlife are included in Farmers' Bulletin No. 1719, "Improving the Farm Environment for Wildlife" prepared in the Bureau of Biological Survey and available on request from the United States Department of Agriculture, Washington, D. C.

Living costs in Amherst are low and the college supplies inexpensive rooms and meals for Farm and Home Week visitors. Advance arrangements may be made by writing to the secretary of the extension service, Massachusetts State College, Amherst.

Summer Fashions

With the coming of vacations, we look forward to the out-of-doors and travel, and plan our wardrobes accordingly.

Let us start with the morning frock, simply made. It may be a dress of contrasting colors; pink and navy is increasingly popular. Touches of white are attractive and flattering.

One never tires of the printed cotton dresses which may be worn either in the morning or afternoon. They are trim and often becoming. For the afternoon let's have at least one sheer, dark frock, one which will be cool in excessively warm weather. It must have a touch of crisp white to be perfect. Nothing is prettier than organdy ruching on a dark frock. It is easy to apply, and very moderately priced. Ruching may be found on the trimming counters of all our stores.

The young girl's dress must be frilly and feminine this year. Its chic will depend on its short puffed sleeves and ruffled collar.

Redingotes are very popular this year. One of lace may be worn over a print or any soft fabric. It is most interesting over a print.

For evening we have both short and long dresses. Striped silks are extremely popular in sheers and stiff materials.

The short dance frocks have come from Paris and measure from 6 to 12 inches from the floor.

Mary M. McIntire,
Home Demonstration Agent

Training Institute For Parent-Teacher Groups

On July 26 and 27 a training institute for Parent-Teacher Associations will be held at the Massachusetts State College. All officers and interested members are invited to attend.

The following people will be on the program:

Mrs. Lydia Lynde, specialist in Parent Education, Washington, D. C.
Mrs. Roland Hall, Worcester.
Mr. Lyle Ring, Medford.
Mrs. James Patterson, Pittsfield.
Mrs. Paul Kelsey, Brookline.
Mrs. Merritt Garland, Bradford.
Mrs. Albert Bemis, Springfield.
Mrs. H. H. Elliott, Winchendon.
Mrs. Belle Johnson, Conway.
Miss Mabel Wilson, Springfield.
Mrs. Waldo G. Edwards, Arlington.
Miss Doris Greenwood, Boston.
Mrs. Luther Putney, Lexington.
Mrs. Edwin Fiske, Greenfield.

Canning Instruction

Instruction in food preservation will be carried on in Essex County throughout the month of July. Notify Mrs. Mary M. McIntire, Home Demonstration Agent, Hathorne, if you are interested in joining the classes which are without charge.



4-H CLUB NEWS



600 Members Attended Annual Field Day

Six hundred members of Essex County 4-H clubs thronged the Essex County Agricultural School, on June 12, for the annual field day.

A special banner, awarded yearly to the club making the best all-around showing in all forms of competition was captured by the Haverhill Forestry Club. Second, was the Homemakers Club of Newbury, and third, the Jolly Bakers of Beverly.

A summary of winners throughout the day follows:

Textile identification: Evelyn Thurlow, Groveland; Jean Hawkes, Saugus; June Milnes, Groveland; Alice Winslow, Saugus; Kitchen ingredients: Ruth Durkee, Danvers; Ruth Woodward, Groveland, Olga Stikiones, Newbury; Kitchen equipment: Roberta Thurlow, Groveland; Olga Stikiones, Rita Robidoux, Haverhill; Clothing judging: Josephine Catali, Beverly; Theresa Gighotte, Haverhill; Marguerite Rhodes, Saugus; Food menus: Barbara Scott, Beverly; Lucille Nollett, Andover; Dorothy McDonough, Beverly; Flower identification: Janice Shute, Peggy Chadwick, Methuen; Elizabeth Ball, Methuen; Vegetable seed identification: Gordon Plummer, Beverly; Janet Noyes, Newbury; Charles Morgan, Essex; Gordon Renault, Methuen; Canning: Margaret Lucy, Newbury; Audrey Boisvert, Beverly; John Checcki, Beverly; Stella Antonio, Beverly; Vegetable identification: Dorothy Paryn, Andover; Charles Morgan, Dorothy Troubetaris, Beverly; Virginia Kean, Andover; Vegetable judging: John Rennard, Methuen; Wilfred Barbeau, Haverhill; Donald Mack, Methuen; Poultry identification: Godfrey Pariseau, Methuen; George Cox, Methuen; Mary Gighotte, Haverhill; Forestry: Lionel Maurier, Haverhill; Leo Melanson, Haverhill; Alfred Rogers, Haverhill.

Horace J. Shute, County Club Agent, was in general charge of the day's program, assisted by Mrs. Vera Underhill, and members of the Agricultural School staff.

Lynn Canning Club Growing

Lynn's canning club has grown from six to twenty-five members this year. The girls are very much interested in their project and have held two meetings and a demonstration of asparagus and strawberry preservation by Walter A. Macdinn, specialist in horticultural manufactures.

This group is working in conjunction with the Scouts.

We Know You Can

Club members, now that fresh fruits and vegetables are in season don't you feel an urge to rush to your kitchens and start canning? You will feel well repaid when your store shelves are filled with the results of your travail.

Every real canning club member who honestly loves to see a tempting array of preserves on her shelves, has started already to can.

By canning fresh products we give our families the right foods of the best quality.

Vera Bisbee Underhill
Assistant Club Agent

Essex County Wins Honors At State Contest

Seven girls from Essex County were chosen to attend the State 4-H Club Contest at Amherst on June 5.

This was one of the finest state contests ever held. Surely every county must have been proud of its representatives.

Essex County was indeed proud when the awards were presented. Marilyn Lewis, of Andover, and Gloria Amiro of Beverly received highest awards in the clothing and food contests, respectively.

Vera Bisbee Underhill

Summer Clubs

Many club members have been asking what they can do during their summer vacations. We hope they will join one of the many clubs which are now being started. There is of course the canning club which enables members to become skillful in food preservation and gives them the opportunity to earn money and win prizes at county and state fairs.

Vera Bisbee Underhill

Special Dairy Awards

Two \$100 awards and special contests for 4-H dairy club members have been announced by the Assistant State Club Leader. One is made by the Massachusetts Society for the Promotion of Agriculture and will be given for the fitting and showmanship contest at the Eastern States Exposition in the fall.

The Capen Farms of Spencer has offered \$100 to the 4-H club member who has the grand champion Guernsey female at the Eastern States Exposition.

ESSEX FARMER AND HOME MAKER

SUMMER CONFERENCE NUMBER

VOL. 18

HATHORNE, MASS., JULY 1937

NO. 7

Wool From Milk Process Found

Spinning Fiber Obtained
From Casein

A process for making wools from milk has been discovered by the Italian inventor Antonio Ferretti. It is becoming of such widespread interest, the process, in simplified form, is herewith printed:

Skimmed milk, treated with special chemical substances permits the coagulation of the casein contained in it, whereupon the casein is drained, washed, and pressed. It may be used immediately while still damp, but may also be allowed to dry. It is then diluted and subjected to a ripening process and after further treatments a product will result ready to be spun. At this stage the industrial process differs but slightly from that of producing rayon. The solution of the textile casein is passed through rolling works provided with nozzles having a diameter of two to three hundredths of millimeter. The solution having been placed into a coagulating bath, the fibre, thus obtained, is cut to the desired length for obtaining a flaky mass. After this the product is subjected to a special washing and eventually dried. One kilogram of casein yields about one kilogram of Lanital.

The Lanital flake resembles Merino wool of quality A (washed and combed) and is warm, insulating, and soft. Its felting capacity is less than that of natural wool, but by a suitable chemical process it is to be expected that Lanital will be successfully felted.

To date Lanital has been generally applied in form of a mixture of 50% Lanital and 50% wool.

MESMERIC MINTS

Even heat waves can be made endurable in New England. With none of the backbreaking toil associated with gardening, small patches of mints (the inviting, curly or apple varieties) can be grown to reap a source of fragrance and flavoring, defiant in the face of heat.

A patch assigned to a definite area needs only to be transplanted each year to prevent its becoming old and woody.

Miniature Dray Drawn by Horses Will be Displayed During Conference Week at the School

Carved by Fred R. Hardy, Head of Farm
Mechanics Department at this School

A miniature dray drawn by four horses, carved by Fred R. Hardy, head of the School's farm mechanics department, will be on display in Agricultural Hall during the three day conference of Vocational Directors and Instructors of the State, August 2 through 4.

The model, whittled with a jack-knife, is nearly five feet long and the horses measure about 11 inches high. The dray is the type used twenty-five years ago by transportation companies and is an exact copy of the last wagon of its kind built at the Daniels Wagon factory which operated in Rowley for over fifty years.

The wagon is constructed to scale, one and one-half inches to the foot.

No detail has been omitted and the familiar skid board, used for loading and unloading, is there, not to mention the tool box which hangs under the wagon. Wheels and axles are exact copies of the original, each wheel spoke being whittled and fitted into the hub. The body is painted red with gold stripings, the wheels and underbody yellow with red and blue stripings.

The four bay Clydesdale horses, with white markings on the faces and legs, characteristics of that breed, lack the wooden appearance of carved figures. The horses are shod and the harnesses are copied from originals of the type used for this purpose.

New Athletic Field

This School has never had a standard, regulation-sized, athletic field for any sport. About a year ago a Federal appropriation was offered us, to be matched by local money.

A heavy maple swamp (the only level land on the farm of 120 acres) was selected as the site. Here the peat was piled and about 16,000 yards of stone put down for a foundation. After graveling, the peat was leveled, and the rest of the progress is easy to visualize.

We have cleaned a very rocky farm of walls and rock piles, drained meadows, and in every way bettered the farm for further agricultural operations.

The new athletic field will offer facilities for football, baseball, track, tennis, hockey, and general field sports. An auxiliary playground for juniors will be another asset.

We anticipate that this field will become generally popular for the use of others than those connected with the School. The project is about eighty per cent completed.

Timber Talk

Thirty-three Essex County farmers are enrolled in the forestry projects under the conservation program. Robert Parmenter, Extension Forestry Specialist, has investigated their lots, suggested woodlot practices, and advised replacement of old wood by seedlings. Conservation Agent C. S. Moxley and the County Agricultural Agent F. C. Smith will make inspections of the resulting timberlands.

There is a gradual increase and demand for good timber in Massachusetts. It is the job of the grower to produce it and Essex County land is ideally suited to this purpose.

Farm crops are becoming increasingly desirable in industry. Only recently the Chemical Foundation Inc., a national research organization, announced that three companies in the north central states are using a blend of gasoline which is 10% corn alcohol. With the United States following the example of European countries who use farm crops for industrial purposes, it behooves individual

(Continued on page two, col. one)

Essex Farmer and Homemaker

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Calendar

July 23-30—4-H Club Leaders
Training Camp at Massachusetts
State College, Amherst.
July 27-30—Farm and Home Week,
Massachusetts State College,
Amherst.
August 2-4—Convention of Mass-
achusetts Directors and Instru-
ctors of Vocational Education at
this School.
August 17—Canning instruction by
Walter Maclinn in Lawrence.
Open to the public.

Welcome

Welcome to those attending the
twenty-sixth annual summer con-
ference of Massachusetts Agricultural
Teachers and Directors, Director
Smith, the Board of Trustees, and
staff of this School extend a hearty
welcome with the hope that you will
enjoy every minute of your brief visit
with us.

TIMBER TALK

(Continued from page one)
farmers to open their eyes to the op-
portunities available to them. Essex
County land might well be used for
the growing of trees and crops more
for industrial purposes than for local
consumption.

Honor Roll

Fourth Quarter

Homemaking Department

Students in the homemaking de-
partment who merited honor roll
grades in the last quarter of the
School year, were:

Seniors

Barbara Clark, Lynn; Winifred Mc-
Kay, Byfield; Yolanda Scamperino,
Lawrence; Amelia Tataronis, Salem;
and Lena Tela, Lawrence.

High School Graduates

Louise Minichello, Ipswich; Eliza-
beth Pyburn, Peabody; Ethel Ross,
Danvers; Irene Snell, Beverly; Ruth
Tronerud, Topsfield.

Juniors

Charlotte Finn, Lawrence; Eleanor
Hoelzel, Middleton; Mary Lafond,
North Andover; Katherine McLaugh-
lin, Saugus; Hazel Mason, Salem;
Madeline Mathison, Methuen; Grace
Taylor, Salem; Ellen Willis, Ipswich;

Freshmen

Ada Marsland, Methuen; Grace
Rainey, Methuen; Edith Sharp, Me-
thuen and Edith Skidmore, Lynn.

Science Tour Instructive

On July 15 students John Kukene,
Lloyd Briscoe, Gerald Hood, George
Georgantis, Teddy and Henry Smolak,
John Wilcox, Albert Batchelder, My-
ron Eastwood, Howard Wilson, Rob-
ert Corneliusen, and Miss Metzger
comprised the annual Science Tour
group. Instructors Eastwood, Milti-
more, Perkins, Gallant, and Wright
escorted the students to the Arnold
Arboretum where many rare plants
and propagating methods were stu-
died, and to the Wirthmore Milling
Company where the students were
guests at a luncheon provided by the
concern.

Alumni Notes

Word has been received of the mar-
riage on July 8, of Miss Lucille Le-
gasse, class of 1934, and Forrest
Haynes, class of 1935.

Joseph Andreas, class of 1935, is
located at the Quarter Masters Corps
Detachment, Fort Shafter, Honolulu.
Rosario Richards, a former student,
is reentering the ornamental garden-
ing course in the fall after a year's
absence during which time he was
employed in the National Youth Pro-
ject.

Lorin Clark, class of 1936, is em-
ployed by Eric W. Wetterlow of Man-
chester.

Huntington Howard, class of 1935,
is at the Dudley Rogers farm where
he has charge of the herd.

Ralph Demuth Glaze, '35, is stu-
dying at the Davey Tree School at
Kent, Ohio.

James Gardella, class of 1935, is
travelling for a poultry feed concern.

Placement of Girls

Summer 1937

It is the object of the homemaking
department of this school to train
girls to become efficient homemakers,
wage-earners in the various branches
of Home Economics, and useful citi-
zens. At the closing of the School
year in June, every girl signs either
for an employed or home project. This
year seven of the students have found
employment in camps; two in conva-
lescent homes; three in hospitals;
eight as household assistants; ten as
waitresses in tea rooms or hotels;
three on private estates; and three as
salesgirls. Fifty of the remaining
girls are carrying home projects:
canning, redecorating rooms, assum-
ing responsibility in planning and
preparing meals, and designing and
making summer clothing.

Summer Evening Fashions

You'll be buying summer evening
gowns. Into the newest selection for
your wardrobe will go great thought
for the gowns you will wear as you
dance.

This season there is a change in
the set-up of evening fashions. There
are two accepted lengths. One
barely reaches the floor; the
other is ankle length. There are two
styles, too, one, picturesque and
quaint; the other sophisticated and
sleek. Stylists have made both of the
most exciting materials you ever saw.

When Paris introduced the short
dance frock some months ago, wo-
men frowned upon it as an impossi-
ble trend which would never cause
great excitement. They were wrong
however, for today these short dance
frocks are indeed popular and are
ideal for summer wear. More than
that, they are charming and grace-
ful, and when made of light, fluffy
materials with swirling skirts they
are a vision of loveliness.

Despite this trend toward shorter
evening gowns, there are still many
lovely and glamorous floor-length
gowns. Either length will be fashio-
nable and smart this season.

Along with deciding the length of
your newest gown you must decide
upon its style. A romantic style will
have a quaint decollete and slim
waist accented by a cascading skirt
that lends a fragile quality to the
dress. The new cottons give a variety
of materials. The more sophisticated
styles are modelled on straight, slim
lines and are made of sleek fabrics
sometimes printed in bold designs.

Phyllis Steele, '37

The world supply of phosphate rock
used in fertilizer is estimated at about
18 billion tons. More than a third of
the known supply is in the United
States.

ESSEX FARMER AND HOMEMAKER

SUMMER CONFERENCE NUMBER

JULY, 1937

The School Farm

Division Work

The School farm and garden work is accomplished through divisions: animal husbandry, dairy and farm crops; poultry; fruit; vegetable gardening; ornamental gardening; floriculture, and farm mechanics. Added to these there is a fruit testing ground and nursery, an apiary, and wooded areas for forestry practice.

Students participate in all farm work, being guided and supervised by instructors or graduate foremen. The work of the divisions is planned by instructors and correlated by staff committees which meet throughout the year. The following paragraphs state briefly the work of each division.

Division of Animal Husbandry and Dairying

This division has three parts, namely the farm, the animals, and the dairy plant. There is an instructor in charge of each.

The purpose of the division is to give the boys an opportunity to do some of the jobs encountered on a farm where forage crops are raised to feed horses, dairy cattle, goats, and swine. Instruction and practice work is required of each student in the care, feeding, and management of each class of livestock and in the planning, growing, and harvesting of forage crops needed for the livestock on the farm. Opportunity is also given for students to get practice in the care and handling of milk, milk analysis, and in the preparation of dairy products.

During 1936 the dairy laboratory made the following milk analysis. The figures cover the number of tests made by the Extension Dairy Service and those made in the laboratory for dairymen, and in regular student class work:

6314 Butter fat tests: milk, cream, ice cream and skim milk, chocolate milk.
1644 Petri dish bacteria count.
320 Breed microscopic count.
92 Chlorine test strength.
18 Alkali test strength.
108 Acidity test.
4106 Total solids.
390 Sediment test.
1920 Checks on flavors and odors.
1920 Brom thymal tests for under condition.

Dairy Plant

The milk from the dairy is sold as special milk averaging less than 1000 bacteria per c. c. containing 4.2% butter fat and 13% total solids. The bulk of the milk is sold at the Essex

County Sanatorium and the remainder at the School and on a small route in Hathorne.

The dairy also makes special dairy products for student instruction and practice.

Dairy Herd

The herd is composed of 13 Guernseys and 10 Holsteins. The dairy herd has stood high in the Essex County Herd Improvement Association for a number of years.

A year ago the herd was vaccinated against Bangs' disease and since then we have had only one case of abortion. Previously we failed to maintain a negative herd by disposing of all animals positive to the blood test. We have eight years' records tabulated on a chart giving the complete data on Bang's disease which may be seen at the Animal Husbandry and Dairy class room.

The Veterinary room in the dairy barn is open for inspection.

Milk Goats

Our goat herd of the Saanen Breed is made up of 16 does and one buck. The dairy goats are making it possible to teach milking and other dairy skills to a larger number of boys. Teaching the technique of milking on goats followed by the milking of cows is not only good teaching practice but is also quite a saving financially to the School. Five to six goats require no more food than one cow and are cared for and fed in practically the same manner.

Because of our goat herd our animal husbandry students get excellent training in the sanitary methods of producing a high-quality milk. Previously the students were unable to get this training before the Junior year.

There is a very special market for goats' milk.

Draft Horses

This division maintains eight horses for the use of all the divisions of the School. They are also used for field and barn practicums in teaching the students various skills.

Swine

A small herd of pure-bred Duroc Jersey sows and cross breeds (the Tamworth crossed on Duroc-Jersey) are kept for breeding purposes. The criss-cross breeding program is followed, supplying excellent feeder pigs for student swine projects and also to outsiders. This department sells from 50 to 70 weaned pigs each year. The brood sows and pigs are pastured on a mixture of barley, peas, oats, and rape each summer.

Fruit Testing Grounds and Nursery

Since you were our guests six years ago, the testing work at the fruit proving grounds has gone forward rapidly. Then we had about 300 varieties under test. Now the number is nearly doubled.

The aim is to test the new varieties from various Experiment Stations and elsewhere as they come along. We are also working with many seedlings of our own origin. Grape varieties appear to be the most promising among these.

We have a blueberry testing area with all of the new varieties in the plantation. Also, we are fruiting for the third time a collection of some thirty-eight varieties of raspberries (see samples exhibited in educational display).

After twelve years of this work we can report some definite results. The strawberry, Catskill, which we reported as No. 4435 (New York State Experiment Station), has now become the most popular and heaviest planted variety in the East. We saved this variety from oblivion.

In raspberries we are still recommending Viking and Newburgh (Newman has not proved as satisfactory). The new Geneva variety, Taylor, is very fine. In cherries, we call attention to Seneca, a new early sweet, and Chase, a red fleshed sour. In plums, Hall and Stanley, varieties of European parentage, are very choice.

In grapes, Fredonia is the outstanding early black. In apples, Milton and Red Gravenstein are outstanding. We are testing about fifteen McIntosh crosses, some of which are certain to take a place in commercial horticulture. Some work is being done on the improvement of the native beach plum.

Floriculture

The division of floriculture conducts one Senior and two Sophomore courses for boys in flower growing, a ten-weeks' course in flower gardening for Junior girls in the Home-making Department, and, jointly with the division of ornamental gardening, unit courses in flower gardening for adults.

A greenhouse with head house and quarters for student operators, frames, supply gardens, cut flowers, and a mixed herbaceous border comprise the physical equipment of the floriculture department.

Conference Exhibits

Antiques

If you are interested in farm antiques visit the collection assembled by Instructor Thurlow in the new farm shop. This exhibit has attracted many visitors to the School and has been shown to several Essex County Historical Societies.

Charts

The collection of charts in the rear of the main hall tell much about the work of the school. Mr. Stimson has used them this summer at the Massachusetts State College. Mr. Mostrom or Mr. Gifford will answer questions pertaining to the charts.

Moving Picture Equipment

Following the lead of Mr. Charles Quimby at the Norfolk County Agricultural School, this School has taken several hundred feet of movie film which we hope you will have the opportunity to see during your short stay with us. We are showing our new Keystone Projector and other visual educational equipment as part of our exhibit. Mr. Meigs will be glad to answer questions regarding this equipment.

Books

A few of our most recent book purchases are on exhibit. A visit to the school library can be arranged for those interested.

Science

The Science department is featuring two exhibits, one a student work prepared by Clayton Teague of Marblehead for the twelfth annual science exposition held last November. The exhibit entails the story of the control of insects and diseases on ornamental plants.

The second exhibit features science letters and other teaching techniques utilized by the science department in promoting the summer science program. Teague's exhibit is the result of the organized summer science program which he followed during the summer of 1936 while engaged in an ornamental gardening project.

Bulletin Files and Pamphlet Binders

The School is indebted to the Friend Box Company of Danvers for the exhibit of file boxes for bulletins and pamphlet binders. Instructors at this School have used this material for several years and find it satisfactory for taking care of the quantities of material that agricultural instructors must keep at their fingertips.

Prize Exhibit

Our prize exhibit is also allied with agriculture. The Groveland Express and four horse hitch was constructed in spare time by Instructor Fred Hardy of the Farm Shop. This exhibit will bear your minute inspection.

Fruit Division

Location and Scope of the Fruit Division Where Students Receive Training in Fruit Growing

Adjacent to the Fruit Building, which is to the rear of the Agricultural Building, may be found the three-year strawberry rotation (now in strawberries, buckwheat, and squash), the vineyard and the raspberry plantation. On the hillside below the fruit building is the small Railroad Orchard, set largely to new varieties of apples.

On the hill across the highway in front of the Agricultural Building the main school orchards may be seen. Since the original planting in 1915, other plantings have been made in 1919, 1925 and 1928. Varieties of apples in the permanent plantings are confined almost entirely to the New England Seven. The pear and plum orchard is above and to the right of the apple orchards.

Poultry Division

The poultry division plans to house 1200 layers in the fall and has at the present time about 1500 pullets on range. Approximately 400 early hatched pullets are in the summer laying shelter and the Shenandoah brooder house now. The latter is given over to laying birds part of the year, and is used for brooding chix in season, thereby being in use all the year round.

The roosting pit construction found in two of the large pens and in several small houses will be of special interest to some of the poultry-minded. Two 12x16 houses designed for both brooding and laying and featuring substantial permanent roofing flanges to eliminate leaky roofs may merit some attention.

Routine work on the poultry plant follows this time schedule: fresh green feed at 9 A. M.; fleshing pellets at 11.30 A. M.; candling and grading of eggs from 3.30 to 5 P. M.; and scratch feeding at 4 P. M.

Foreman Gordon Hall graduated from the School last fall, and his assistant Henry Smith is in his first project season. Both of these boys will be pleased to show visitors over the poultry plant.

Auto Repair Course

A twelve-week course in auto repair is conducted each year by an expert garage mechanic. Students' cars, School trucks, tractors, and other equipment offer material on which to work. Juniors have one full week in the shop and Seniors may repeat the course if they desire and can be accommodated.

Farm Mechanics

This division takes care of all ordinary repair jobs pertaining to school buildings and equipment, farm buildings, tools and machinery, new building construction such as poultry houses, horse barn and cow barn. We encourage each student during the winter months to make some useful article to take home. Wheelbarrows and stepladders seem to be popular choices. We average 20 wheelbarrows and 12 stepladders each winter. Whiffletrees, axe handles, tables, bookcases, flower boxes, and ferneries are prominent among the student accomplishments. The students are charged only the actual cost of materials used in their jobs.

Over 1000 flats are constructed each year for the greenhouse and market garden division.

Apiary

Pollination agencies are necessary in the field, garden and greenhouse. The honey bee is the best of nature's insects for this purpose. The school at present has eighteen colonies of Italian bees. The main apiary is located on the hill beyond the orchard. Other apiaries can be found in the fruit nursery and near the greenhouse. Several kinds of insulation materials are used for winter packing. If not acquainted with the busy little bee, Mr. Meigs will show his pets. Make reservations early.

Wooded Areas

Surface rocks from the School woods were removed this last year. A new natural seedling will follow this stirring of the soil. The hill woods have been kept clean of all weed trees and thinnings have been made by our forestry students. Openings between the trees have been planted with Austrian, Norway, Scotch pines and spruce seedlings. A grove of American lindens (i. e. Basswood) have been started. Cordwood, fence posts, and dimension materials are furnished by the forestry section to other departments in the School.

Ornamental Gardening Division

The working laboratory for this section are the campus and nursery. The nursery, located back of the Main building is used as a place for the study of varieties and development of perennials, grasses, shrubs, trees, and to produce plants for the development of the campus. The lawns, walks, drives, wall, and specimen plantings, all serve their purposes in the teaching program.

Robert Corneliusen and Howard Wilson, upperclassmen in the School, will be available at the nursery and about the grounds to impart any information pertaining to the department.

Student Projects

Summer project tours for students at this School began in 1931 under the guidance of instructors E. E. Metcalf and C. M. Wood. Two separate trips were taken that year, one covering garden projects and the other, general farms.

On July 20, 1922, the Essex Chapter of Future Farmers of America held a Field Day at Hathorne. About 100 students and graduates attended. Mr. John S. Lawrence of Topsfield was guest speaker and Messrs. George Thurlow and Melville Grey of the Board of Trustees were present.

On August 17, 1933, projects in Andover and Lawrence were visited. Luncheon was eaten on the shores of Haggetts Pond in Andover.

On August 16, 1934, visits were made to Alden Parker, Topsfield; Teddy Smolak, N. Andover; Archie Nimmo and Roland Wagner, Methuen. The group spent the late afternoon at Canobie Lake Park.

The next year, on August 15, the projects of Warren Towne and Gilbert Freeman of Beverly; Lawrence Shanks and David Elwell, Essex; Charles and Norman Chambers and Maynard Tucker, Ipswich; and Hollis Lufkin at Corliss Brothers, Gloucester, were visited. After a clam bake at Stage Fort Park, the boys played baseball and enjoyed a swim.

Last year on August 20, three projects were visited. William Paisley's fruit and poultry farm in West Boxford where student Burkhardt was employed was the first stop. Charles Pettengill's project at Grey and Cole's nursery in Bradford was the next stop, after which the group visited the market garden farm of graduate Harold Rogers. A clam bake and ball game at the Merrimac Playground and swim at Lake Attatash terminated one of the most satisfactory tours.

1937 Project Tour

The 1937 project tour will take place on August 19. Projects in Danvers, Peabody, Saugus, Lynn, Swampscott, and Marblehead will be visited. Gary Sano is chairman of the committee and will be assisted by students from the southend section of the county. Although plans have not been completed, luncheon will probably be enjoyed on the Lynn-Nahant causeway. Steamed clams, frankfurts, sweet corn, rolls, and coffee will be prepared over an open fire and sold at cost. Ice cream and tonic will be on sale. The program will include baseball and swimming either at Nahant or Marblehead.

Announcement has been made of a Civil Service Examination for Inspector of Eggs, to be held August 12, 1937. Applications must be filed with the Massachusetts Department of Civil Service, 145-152 State House, Boston, not later than Thursday, July 29, 1937 at 5 P. M.

Delphiniums

A. M. Davis

If you have been growing delphiniums and have been pleased with their habit of growth, their color, their vigor, or other desirable traits, now is the time to think about the particular vines you liked best.

When the seeds are fully ripened, pick them off, place them in a paper bag upside down, and shake the bag vigorously to free the seeds.

In preparing a seed bed, it is desirable to work up the soil thoroughly, add some old barnyard manure, and then rework the soil so that the manure is incorporated well into the soil. Perhaps a place 4 feet square in a sheltered, well-drained location will be all of the area necessary for starting the plants. The seeds may be sown broadcast or in rows. I prefer rows. The seedlings will be small this fall and can be wintered very easily by covering with a couple of boxes with a few leaves under the boxes.

Next spring after all danger of freezing and thawing is past, the boxes are removed and the leaves destroyed. The seedlings will soon show up and will grow until they have attained sufficient size to transplant easily. They will probably bloom in the fall and by the third year will have produced vigorous clumps to be worked into the garden.

The seeds should be planted as soon as they are thoroughly ripe.

Poultrymen Warned Against Defraud

Recently the Massachusetts Department of Agriculture has revoked transportation licenses of poultry dealers whose violation of the transportation law has been the means of defrauding poultrymen.

The following notice containing that section of the law which gives information required by the transportation law, is printed herewith for the benefit of both poultrymen and poultry dealers:

"Section 152B. No person, other than a lawfully authorized common or contract carrier, shall transport live poultry in connection with the sale thereof, from place to place upon any public highway or road unless he has in his possession a bill of sale or memorandum signed by the vendor and containing the vendor's address, the date of sale, breed, weight, price, and number of poultry, or such information as will particularly describe such poultry and establish the proper ownership thereof."

Poultrymen should demand that full information be given on the sales slips which they must sign.

In a recent elm census report, the value estimated for the elms in four Massachusetts cities and towns was conservatively placed at \$7,300,000.

Garden Chat

Between 300 and 400 varieties and strains of varieties of vegetables are being grown at the School market garden this season. Some of these strains were grown last season here and are being tested again to substantiate the evidence in their favor last season. Newer varieties and strains are added for trial.

Some of the finest iceberg lettuce that the school has grown has been harvested this season. There has been little choice between N. Y. No. 12 and N. Y. No. 515. Heads running close to three pounds each have been very numerous.

Japanese or Ebenezer onion sets are maturing. Seed onion fields are looking "seedy" about the County and it would be well for growers to resort to set-growing and abandon the seed method.

The first or second weeks in August will be the best time to study the thirty-five varieties and strains of sweet corn.

Considerable Wilt seems to be prevalent in the squash fields. Infested plants should be removed and destroyed so that the striped cucumber beetle will not carry the disease to healthy plants.

Next October will be the interesting month to observe the twenty different kinds of late cabbage and as many kinds of celery.

In the tomato variety plot, straw mulch is being used under one-half of the rows along with a fertilizer study using extra potash. Will there be less cracking and less blossom-end rot on the vines that have been mulched, or not? Come around and look the varieties over for yourself.

Beans, carrots, peppers and squash offer other interesting studies in the variety study plots.

C. M. Stearns

Prune Climbing Roses

Once again it seems well to point out the feasibility of pruning the old wood from the climbing roses now that they have finished their period of bloom. Also, shrubs which have become overgrown due to the satisfactory conditions we have had this spring, should be pruned now. Shear some of the coniferous types of evergreens which have made phenomenal growth this season.

A little pruning now will do much to give flowering shrubs an attractive appearance next season. It will also stimulate the formation of the long vigorous canes which give the most satisfactory blooms.

The beaver is reported to be making a strong come-back in Wisconsin. This spring they had advanced to such a point that trapping was permitted in 18 counties. The Department of Conservation reported that 591 trappers took 5,747 beavers valued at \$56,000.

Canning Instruction Eagerly Received In County

During the month of July, Walter A. MacLinn, assistant to Professor William R. Cole, Extension Specialist in Horticultural Manufactures at the Massachusetts State College, gave canning instruction to Essex County residents of Lawrence, Haverhill and West Boxford.

Forty-five interested homemakers represented the Lawrence group, with Mrs. Walter Dean organizing the class. These women were the Mesdames Mary E. Borneman, Walter Hanson, Charles Keefe, William Halloran, Annie Moynihan, Mona Jones, Lillian Lavery, Ida Fiedler, Kathryn Foley, Florence Brown, Margaret O'Brien, Mary Moynihan, Joseph DePippo, Frances Finocchiaro, Alice Hay, Genevieve Pullman, Josephine Maloney, Delia O'Connell, Tessie Grady, Helen Hadad, Mary Rae, Nora Laurandean, Rose Midolo, Sabina Spillane, Mary Howarth, Graziella Begin, Annie Loftus, Sadie McHale, Permena Proposki, Stephen Maher, Agnes Callahan, Elizabeth Keenan, William McGurn, Joseph Byron, Catherine O'Connell, Annie Cummings, Severine Fling, Mary Cook, Mary Mello, Margaret Cadaret, Dorothy Wheeler, Josephine O'Neill, Genevieve Bailey, Kathryn Hoar, and Anne Stevens.

The following group, under the leadership of Mrs. John Andrews, received instruction in West Boxford: Mrs. Frank Spofford, Mrs. Edith Whittier, Mrs. H. E. Mead, Mrs. Charlotte Colby, Mrs. E. E. Pear, Mrs. Clayton Nelson, Mrs. Calvin Rea, Mrs. Edward Frost, Mrs. John Chadwick, Mrs. Harry Cole, Mrs. Herbert Sperry, Mrs. Marjorie Andrew, Mrs. Belmont Perkins, Mrs. Everett Chadwick, Mrs. R. L. Wetherbee, Mrs. Jennie Nason.

Representing Haverhill, under the leadership of Mrs. John K. Lewis, were, Mrs. Guy Haynes, Mrs. George Haynes, Sr., Mrs. Warren Dodge, Mrs. J. H. Tabberak, Mrs. Elphege Bouchard, Mrs. George Eno, Mrs. Charles Merrill, Mrs. Edward Ayers, and Mrs. Charles Sargent.

Four additional meetings under Mr. McLinn's instructorship are scheduled to be held in the county during August and September. The established date is August 17 at Lawrence. August 18 and September 9 and 10 are open dates. Interested communities should correspond with Mrs. Mary M. McIntire, Home Demonstration Agent, Hathorne.

The soybean has a wide range of commercial uses. Paint, varnish, door knobs, floor coverings, window sills, plywood, wall paper, sprays, and plastics are among the products made from this crop.



4 - H CLUB NEWS



Canning Contest For Massachusetts Mem- bers 1937

Exhibit Requirements

1. Any 4-H club member between the ages of 10 and 21 may enter the contest.

2. The exhibit shall consist of one jar of non-acid vegetable and one jar of fruit. Any glass jar may be used. Jars will be judged as a pair.

3. The county judging will be done (in Essex County) at the Topsfield Fair (September 15). Prizes

County prizes will be awarded on the number making exhibits, as follows:

1. 25 or more; two dozen canning jars to the winner.

2. 40 or more; \$5.00 divided, \$2.00, \$1.00, \$1.00, \$1.00.

3. 75 or more; \$10.00 divided.

4. 100 or more; \$15.00 divided.

State Prizes

One trip to the State Camp will be awarded to a county club member 15 years of age or over who exhibits in the above contest and whose record merits the honor of the member's attending State Camp.

Farmers Bulletin 1738, "Farmhouse Plans", contains 40 plans prepared by the Bureau of Agricultural Engineering in cooperation with the state colleges. Free copies may be obtained from the Mailing Room, Massachusetts State College, Amherst.

Delegates To State Camp

On July 15 the following 4-H club delegates from Essex County were transported to the campus of Massachusetts State College, Amherst, headquarters for the state camp which is an annual function of the 4-H club program:

Frederic Usher, Danvers
Eleanor Harris, Danvers
Dorothy McDonough, Beverly
Audrey Boisvert, Beverly
Bertha Rosun, Beverly
Winnie Gould, Saugus
Audrey Amidon, Saugus
Alton Page, Saugus
Evelyn Thurlow, Groveland
Frank Rowinski, Haverhill
Ruth Irene Wadsworth, Saugus
Ruth Irene Wadsworth, winner for

two years of a national music contest sponsored by the National Music Teachers Association, accompanied the 4-H orchestra during the State camp week.

Leaders' Training Camp Represented by Essex County

Essex County adult leaders in 4-H Club work who are attending the leaders' training camp at Amherst from July 23 to 30, are:

Mrs. Richard Abbott, Andover
Mrs. Leon Jordan, Groveland
Miss Frances Hartman, Andover
Mrs. Mary Peatman, Ballardvale
Mrs. Edna Rundquist, Gloucester
Paul Corson, Saugus
Mrs. Hazel Rose, Saugus
Mrs. Ruth Bissett, Lynn

How to Write Radio Plays

The second of two talks by the director of the National Broadcasting Company Continuity Department, will be broadcast on July 29 at 1.30 P. M. Eastern Daylight Saving Time over station WBZ and WBZA. The broadcast's primary object is to convey instruction in the writing and production of radio plays.

Prizes are being offered by the RCA to 4-H clubs and members for winning plays which they may create. The winning club will be awarded a trip to Chicago with expenses paid. Individual winners will be presented with an RCA radio. For detailed information, club members should consult their County Club Agent, Horace J. Shute, Hathorne or his assistant, Mrs. Vera Underhill.

Old Bell Tolls

One of the odd requests coming to Mr. Hardy of the Farm Mechanics division was to make a new bell rope for the Congregational Church in Middleton. This offered no difficulty to Instructor Hardy who immediately dismantled the old wheel and set about constructing a new one of like dimensions. The new wheel, measuring 5½ feet in diameter is now in place, to the delight of the listeners for Sunday's toll.

**ESSEX COUNTY
FAIR
SEPT. 15 to 20**

ESSEX FARMER AND HOME MAKER

VOL. 18

HATHORNE, MASS., AUGUST 1937

NO. 8

Roy Fleming Addresses Pennsylvania Goat Breeders

Upper Bucks County, Pennsylvania, was the July meeting place of the Delaware Valley Milk Goat Association at which Roy L. Fleming of the Essex County Agricultural School, Hathorne, Mass., gave an instructive talk on "Plants Poisonous to Goats." Common names, Generic Names, the

Essex County Fair Sept. 15, 16, 17, 18, 19

"The finest agricultural display in New England" describes reservedly the annual Essex County Fair in Topsfield.

This year, on September 15, 16, 17, 18, and 19, Wednesday through Sunday, the Granges will occupy their building to the South of the main gate, competing, tooth and nail, for the Grand prize; to the North and

Brazilian Glorybush Grown At Essex Aggie

There are many odd-flowering plants not grown by many florists but whose beauty and color are beyond compare. One of these is the Tibouchina semidecandra, commonly known as the Brazilian Glorybush, grown in the Agricultural School's greenhouses. It is a tall-growing shrub from Bra-



Habitat and the portion of the plant containing the poison were listed and presented, in syllabus form, to the audience. (Copies may be obtained by Essex County goat breeders on request to the School). The list was long and contained many familiar names but the alarm expressed by many was allayed when Instructor Fleming pointed out that while some were very deadly most were only mildly poisonous and the poisonous quality often varied with location and kind of soil. White snake root, for instance, is poisonous in Indiana but not around Washington, D. C. Sudan grass and choke cherry are more poisonous if growing in soil rich in nitrogen. Weather conditions that disturb the water balance in the plant may make it more poisonous and animals seem to recognize this fact. During the drought in Kansas, grasshoppers would not eat sudan grass but after a rain they devoured it. Mountain laurel, the State flower of Pennsylvania, while eaten without harm by deer is poisonous to goats and honey made from its blossoms is poisonous to humans.

If a goat is suspected of being poi-

(Continued on page 3, col. 2)

East, New England grown flowers, vegetables and fruits will rear their mighty heads; directly East, swine, goats and cattle, the pick of their herds, will seek ribbons and cups. The 4-H clubs, in sight of the gate, will display handicrafts, canning and clothing achievements, garden produce and forestry studies. A building in the center of the grounds will shelter the household arts exhibited by New England women: hooked rugs, patch work quilts, cross-stitched samplers, and knitted afghans. In its usual section in the Grange building the Essex County Agricultural School will demonstrate the processes involved in furniture renovation, the exhibit being prepared by Mrs. Mary M. McIntire of the County Extension Service.

Industrial displays will mingle with the others. A midway will provide amusements. Grandstand attractions will include many new and special death-defying features. On Thursday and Friday oxen and horse-pulling contests will warm the hearts of the oldtimers who link these sports with the early Fairs. There will be racing, wrestling, and thrill stunts. There will

be a member of the Melastoma family and related to Schizocentron. This is the name applied to the plant in Guiana. It has hairy green foliage and a beautiful lavender-blue flower. It is ever-blooming but each flower lasts but a day. When the petals fall the pistil and stamens remain, giving the old flower the remarkable resemblance of a spider. When in full bloom it strikes your eyes with its breath-taking blue brilliance.

It requires a high house or conservatory when trained against the wall on a trellis. It is very effective when grown in this manner.

When the soil is too acid the foliage becomes discolored, taking on a yellowish tinge. If kept too moist, the edges of the leaves turn a light green.

This plant is grown mostly on private estates and in conservatories but the time and care required to bring it to its full glory are well spent.

be vaudeville and horse-shoe pitching. There'll be tugs-o'-war, and livestock parades. Above all, there will be the 116th annual Essex County Fair, without which Essex County would be as naught.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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Association
Secretary, R. H. Campbell Topsfield

Calendar

September 7—Opening of agricul-
tural and homemaking depart-
ments of the school to new stu-
dents.

September 8—Opening of fall term
for old students in the home-
making department.

September 15, 16, 17, 18, 19—Es-
sex County Fair, Topsfield.

The North Shore Horticultural So-
ciety awarded this School a bronze
medal certificate for a display of new
fruits on August 13.

New students will enter this School
in less than two weeks. Final enroll-
ment will exceed that of any other
year. It makes us stop to take count
of the alumni. 535 young men have
graduated from the agricultural de-
partment, and 563 young women from
the homemaking school, a total of
1102. Approximately 1000 others have
received partial training in agricul-
ture or homemaking. About 70% of
the agricultural graduates are follow-
ing agricultural or related lines.

150 men have taken the poultry
unit courses offered by the school.
125 have graduated in the dairy unit
courses and 140 have had home
grounds training.

Broughton

In the fall of 1930 Ralph Brough-
ton, graduate of a local primary
school, enrolled in the Essex County
Agricultural School. With a special
aptitude for poultry practices and a
natural bent for general farming,
Broughton completed, in 1933, three
summer projects embracing market
gardening, dairying and poultry prac-
tices.

During his Senior year he specializ-
ed in advanced poultry work and it
was then when he decided that a re-
tail poultry business involving dress-
ed poultry and eggs offered him the
best opportunities for becoming per-
manently established in the agricul-
tural field.

Starting with three hundred chix
and a small retail trade in 1933, his
trade and plant have grown increas-
ingly and steadily until now his busi-
ness comprises 1000 sex-linked pul-
lets and cockerels of the Red and Rock
cross. Pullets and cockerels have
been purchased separately, the for-
mer for their livability and produc-
tivity and the latter for their su-
perior market quality. Broughton dress-
es practically all of his poultry and
plans to house 600 pullets this fall.

No small help on the poultry range
is Ralph Jr., a small, three-year-old
son.

Grape Ade

1. Remove grapes from stems, dis-
carding green and over-ripe fruit, and
wash thoroughly.
2. Put 1 cup of grapes and 4
ounces of sugar into a clean, hot
quart jar and fill immediately with
boiling water.
3. Seal instantly.

Alumni Notes

Word has been received of the re-
cent marriage of Milton Soper, class
of 1931. He and Mrs. Soper are liv-
ing at 75 Archer St., Lynn.

Walter Licht, former student, is
employed by the H. K. Webster Grain
Co., Lawrence.

Herbert Whittier, class of 1924, is
employed on the John S. Lawrence
farm, Topsfield.

Edmund G. Sargent, a former stu-
dent in the class of 1920, is sales
manager for the I. E. Ilgenfritz Sons
Co., Monroe nurserymen, Monroe,
Michigan.

County Agent's Brevities

Joseph Smith of Topsfield has sug-
gested a method of curing a kicking
cow. While milking, have an attend-
ant take an S crook in the cow's tail.
By applying a little pressure the de-
sire to kick is forgotten. "Three or
four days' treatment will cure the
most stubborn," says Mr. Smith.

And how to keep the high flier at
home; the cow who jumps over every-
thing this time of year? Put a halter
on her; attach a rope to the ring
under her jaws, fastening it to a
ring attached on a leather band to
her lower front leg. Allow enough
freedom for the cow to eat grass, but
pull the rope tight enough to prevent
her raising her head high enough to
enable jumping. This method has given
satisfactory results.

F. C. Smith,
County Agricultural Agent

VITAL STATISTICS DEPARTMENT

PRODUCTIVITY OF STUDENT PROJECTS

At this School, student projects are classed as "home ownership" or "em-
ployed." For the year ending October 1, 1936, a gross total of \$80,356.78 was
realized by 188 regular day students.

Employed projects account for more than one half of the total financial re-
turns. The following table shows the scope and returns from the different
kinds of projects for the year 1936.

KIND	SCOPE	RETURNS
Floriculture	1,538 sq. ft. glass 11,000 sq. ft. land	\$1,199.74
Fruit	429 apple trees 25 peach 18,434 strawberry plants	
Poultry	500 raspberry plants 829 hens 8,600 chickens 445 turkeys	1,303.05 16,068.23
Swine	13 pigs	308.00
Roadside stand	200 sq. ft.	1,497.98
Vegetable gardens	25.01 acres	6,785.16
Employed projects	\$13,656.56 unpaid labor \$39,538.12 paid labor	53,194.68

Poultrymen May Receive Financial Assistance

Howard Wilson, Secretary of the Massachusetts Federation of Poultry Associations, has just called attention to the fact that the Farm Debt Adjustment Section of the Resettlement Administration has ways and means of helping financially distressed poultrymen.

The Farm Adjustment Division investigates thoroughly a poultryman's financial condition and it is possible for them to assist by adjusting his debts, or in certain cases by making a long term loan in order that he will not be forced into bankruptcy. In a number of Massachusetts cases they have already been able to assist poultrymen and have been instrumental in preventing their going out of business.

Poultrymen interested in this type of farm Credit should consult with the Resettlement Agent, Brockton, Mass., or with their County Agricultural Agent, F. C. Smith, Hathorne.

Personals

The Phelan farm of Haverhill is putting in a field of alfalfa this year.

The Meredith Farm is trying molasses silage.

Raymond Adams of Newbury is setting out a cranberry bog, the first domestic bog in the county.

The Argilla farm in Ipswich is running an alfalfa demonstration.

County Conservation Agent Charles S. Moxley requests that those farmers desiring to collect under the Soil Conservation Act, notify him at the Essex County Agricultural School when ready for final inspection.

Archer Pierce of the Brooksby Farm, Ipswich, entertained the county fruit growers' committee recently. Plans for exhibits at the Essex County Fair were completed. Mr. Pierce's young orchard of Baldwins set out three years ago and heavily mulched is already bearing fruit. Growth on these trees is phenomenal.

Bradford Webb of the Greycroft Farm, Wenham; John Kachadorian, Methuen; and Wallace Standley, Melrose, have joined the county fruit committee (the committee which has charge of county fruit growers' activities.)

C. M. Warburton of Haverhill is another of the county farmers who is trying a field of alfalfa this year.

According to G. A. Meigs, beekeeping instructor at the School, the dry, hot weather has deprived the flowers of their nectar. He advises beekeepers in the county to feed their bees equal parts sugar and water to build up new stores for winter.

Plant Evergreens Now

Late summer and early fall represent the best time of year for transplanting evergreen shrubs in the gardens or making foundation plantings around houses. If you are anxious to have some of the richer evergreen material used close to the house, shrubs procured at this season will become well established by winter and should be in a vigorous condition to start growing early in the spring.

When transplanting shrubs of any type, make the hole in which the shrub is to be placed sufficiently large to accommodate the root system without crowding or cutting off the roots. It is safe, in handling evergreens, to have nearly as much root system as you have roots. This means, in the case of "collected material" (material which has been growing wild) that pruning back of the top growth is imperative. After setting the plants into the ground, fill the hole firmly with good loam and add a liberal amount of water. Water might well be added every week until frost, enabling the plant to absorb a maximum amount of water to prevent the top from drying out and suffering the windburn usually experienced by evergreens during the winter season.

When setting out evergreens or establishing them as foundation plantings, allow plenty of room for their maximum development. Plants of this type are vigorous growers unless they are the true dwarf type. If sufficient room is not allotted to each individual plant, they will soon become crowded and cause each other's death.

Foundation plantings set out with proper thought and care will make a house grow out of its surroundings. Low-growing and spreading varieties (Japanese yew) are recommended for doorway plantings. Tall, upright arborvitae, junipers, or hemlocks planted at the corners will soften the lines of the building and tie the whole into the ground. A tree which may be established advisedly, despite its size at maturity, is the Nordmen fir. It is especially recommended for the Christmas season, and may be planted now.

Randy Ackerman of Salisbury, member of the Essex County Poultry Association, has received the \$100 reward offered by the Association for the arrest and conviction of a poultry thief on a member's property.

GOATS

(Continued from page 1)

soned, a quart of warm milk administered to the animal will dilute the poison.

Sweet clover, though not poisonous, destroys the clotting property of blood and if an operation is intended on an animal she should not be fed sweet clover for at least three weeks before.

Garden Chat

Two farmers met recently and in the course of the conversation Farmer A said that his crops were showing signs of dry weather. Farmer B said that his could stand some rain but that they were not suffering too badly.

"How's that?" asked Farmer A.

"Well, I plow under all the organic matter that I can during each year," Farmer B replied. "The presence of organic matter aids in retaining moisture and this is important during hot, dry weather, as it aids plant food assimilation."

Remember that plants receive plant food in solutions taken in through their roots and unless there is moisture present in the soil, the plants do not receive their proper balance of food and therefore do not make proper growth. Why not plan now to add more organic matter to your soils so that another year your crops will not suffer as they may have this season?

In a recent survey of Essex County, more than two hundred acres of Blue Hubbard and Warren Turban Squash were found growing this season. If these growers can figure on six to seven tons per acre, there is quite a tonnage produced in our vicinity.

Growers should not forget to keep their tomato vines covered with Bordeaux dust or spray to control or prevent late blight that has caused much damage to the late crop of fruit in years past.

Early Sensation yellow corn was harvested earlier than other varieties in the corn trials at the Essex County Agricultural School. Golden Cross Bantam is an exceptionally heavy yielder and high in quality for a late variety.

Waltham Forcing, as a trellis variety, surpasses all other varieties in the tomato trial plot.

Why not visit the School Market Garden and see for yourself some of these outstanding varieties?

C. M. Stearns

"Square" Farming Losing Favor in "Round" Country

In many parts of the United States, farmers are abandoning "square" farming on naturally "round" land in favor of contour farming and strip cropping on the contour, as advocated by the Soil Conservation Service. Rectangular fields and straight fences and rows have often been the custom, even the mark, of a good farmer, wherever slopes were not too steep. Row right over the tops of hills, straight up and down slopes, created drainage channels that quickened erosion and increased soil and water losses. Farmers are finding that contour farming takes no more time, decreases erosion and run-off, and requires less power.

Fall Fashions Favor The Forties

Fall fashions are in and we are glad to say that the designers have, at long last, given some thought to the "frank forties". All thought in the past has seemingly been concentrated on the tempestuous twenties. Many times the older woman has wished that she might have blended in her wardrobe a few of the soft and becoming lines so profusely given by the designers to the younger group, and at last they have arrived. This year's fall fashions are more skillfully cut with slenderizing lines adapted to older figures.

The sports dresses have softly tucked bodices and pleated skirts.

For afternoon wear we find draped sleeves, V necklines, and slenderizing skirts.

Materials

The new woollens we find on the counters are many and beautiful, both in color and texture. Plaids for skirts or coats; clan plaids we expect to be quite popular with the younger element but may be worn in conservative sizes by older women.

Tweeds in many weaves and colors are being found, softer in texture and very dashing under short fur coats.

We are happy to say that the "forties" are going to step right along with their younger friends this coming winter.

Mary M. McIntire,
Home Demonstration Agent

Tomato Juice

One bushel of good tomatoes will yield about twenty pints of concentrated juice.

1. Wash the tomatoes and trim off all greenish spots. Place them in a kettle. Crush a few to secure enough free juice to start the cooking.

2. Cover the kettle and boil moderately until the tomatoes are soft. Allow to cool without stirring, before pulping.

3. Run the cooled tomatoes through a fine sieve or fine colander. If a fruit jar is used to force the pulps through instead of stirring with a spoon, the time necessary for this operation will be reduced one half or more.

4. Measure the pulp and return to the kettle and boil rapidly without cover until the volume is reduced one half.

5. To this concentrated pulp add 2 or 3 tablespoons of granulated sugar and 1 to 2 teaspoons of salt per quart of finished juice. Stir to solution.

6. Fill the hot pulp into clean dry pint jars, partially seal and process them in the water bath at boiling temperature for 20 minutes.

7. Remove the jars, complete the seal, and set them aside to cool before storing.

Grape Jelly A Quick Way

A new and quick method of making grape jelly eliminates the over-night straining included in the old method. Following is the recipe of William R. Cole, Specialist in Horticultural Manufactures, Massachusetts State College.

1. Use 2 pounds of firm ripe grapes. (Over-ripe fruits give a syrupy jelly and under-ripe fruits give an inferior flavor.) Remove stems, green, and decayed fruits.

2. Wash thoroughly.

3. Add 1 pint of water to grapes and boil slowly for 10 minutes.

4. Strain through one layer of cheesecloth, taking all free-run juice.

5. Return pulps to kettle with 1 quart of water, cover, and cook slowly for 10 minutes.

6. Strain juice through 1 layer of cheesecloth, squeezing out all juice possible.

7. Mix two juices (they may be strained into same kettle) and strain through four layers of cheesecloth.

8. Concentrate juice to a scant quart.

9. Add 1½ pounds of sugar and boil until the syrup sheets and tears away from the edge of spoon.

10. Pour into glasses. When cool, wipe off glass above surface of jelly if necessary and cover with melted paraffin.

11. When paraffin has cooled, store.

NOTE: Over-ripe (best eating) grapes may be used if apple jelly stock is added to grape stock measure for measure. In this case use an extra 3-4 pound of sugar after concentrating the mixture to 1½ quarts.

Grape Butter

Whole grapes may be used for this but a good grade of grape butter, which is less apt to contain potassium bitartrate crystals, may be made of the pulps from which grape juice has been taken.

1. Remove grapes from stems discarding green and over-ripe fruit.

2. Wash and crush two pounds of grapes—or use 1½ pounds of pulps from which grape juice has been taken.

3. Cook until very soft.

4. Strain through a fine colander or sieve to remove seeds and skins.

5. Boil these pulps rapidly until quite thick.

6. Add 1 pound of sugar and cook to jam consistency or until it will give a jelly test.

7. Pour into jars, partially seal, and process for 3 to 5 minutes.

8. Complete seal, cool, and store.

Cash Prizes To The Winners

The following general information is intended to suggest to new 4-H club members the range for exhibiting and competing which the Essex County Fair offers them. These rules and regulations may be supplemented by a complete premium list which will be furnished 4-H members by the County Club Agent, Horace J. Shute.

Rules and Regulations

1. All entries close September 11, 1937.

2. The department is open to any 4-H club member in Massachusetts.

3. All entries must be made by giving the Class number on the attached entry blank.

4. Exhibits shall have been produced, made, or grown, by the exhibitor during the 12 months previous to the exhibition.

5. Exhibit must be in place by 10 A. M. Wednesday, September 15, 1937.

6. Every exhibit must be plainly marked with class, owner's name and address.

7. The committee will reserve the right to exclude any exhibit of inferior quality.

8. An exhibitor shall not make more than one entry in any one class. A prize will not be awarded an exhibit unless it conforms to the class as specified.

9. The Agricultural Society offers prizes for the following classes:

- Vegetable exhibit.
- Poultry exhibit.
- Canning exhibit.
- Ball Brothers' Contest.
- Clothing exhibit.
- Food exhibit.
- Handicraft exhibit.
- Homecraft exhibit.
- Forestry exhibit.
- Flower exhibit.
- Judging contests (canning, clothing, food, and open judging.)

A special sweepstakes prize will be awarded to the highest scorers, as follows:

Girls \$5.00.

Boys \$5.00.

A special prize will be awarded to the individual for the best display illustrating his project for the 4-H parade.

All entries close September 11.

Entry blanks and premium lists, remember, may be secured through County Club Agent, Horace J. Shute, Hathorne, Mass.

SEPT. 15 to 19
FAIR
ESSEX COUNTY

ESSEX FARMER AND HOME MAKER

VOL. 19

HATHORNE, MASS, SEPTEMBER, 1937

NO. 9

New Records At Poultry Plant

The past season has been an unusually satisfactory one from the standpoint of production records. So many new ones have been established that since early in August the situation parallels that of "iron-man Lou Gehrig" in baseball—every succeeding day breaks an old record and establishes a new one. Our yearly summaries of production begin Sept. 1st, each year and end the following Aug. 31st, and already in September some new daily high marks have been recorded for the 1937-1938 season. In some years the total number of birds housed has varied enough to affect the annual records to some extent, and in other years extra early hatches may have had some influence, but this would be more noticeable in monthly than yearly totals.

The statistics by years since 1931 are given below:

1931-32—135,104 eggs
1932-33—153,061
1933-34—117,050
1934-35—168,060
1935-36—149,663
1936-37—182,105

The month of August just completed was second highest month of any in the period above with 19,479 eggs against the top of 19,818 recorded in March 1935. The fact that a late summer month almost equalled a spring month when birds are at their peak is very unusual and satisfactory. Eggs are much higher in price in late summer and fall and all poultrymen make an effort to distribute their hatches in such a way that they can maintain production at the time when there is a seasonal slump and correspondingly higher prices.

The highest day's production in the various years are as follows:

Year	Date	No. Eggs
1931	Mar. 16	608
1932	Dec. 9	645
1933	Mar. 6	575
1934	Dec. 29	650
1935	Mar. 6	670
1936	Jan. 19	653
1937	Sept. 8	808

It will be noted from the above data that Sept. 8, 1937 showed a peak high above any other year. This is partly due to a larger number of early hatched birds, but also in no small measure to a high rate of production.

Along with the flock records, a new high individual record has been achieved. This year has seen our first 300 egg bird, but that is a story in itself for a later issue.

What To Talk

Talk Happiness: the world is sad enough

Without your woes. No path is wholly rough;

Look for the places that are smooth and clear,

And speak of those to rest the weary ear

Of earth so hurt by one continuous strain

Of human discontent and grief and and pain.

Watch Your Bees At This Time

For those who keep Bees, August first was the beginning of the Bee-keeper's New Year. Three important things the Keeper should have in mind; first be sure that there are plenty of young bees in the hive. Second, there must be ample stores to carry the colony through the winter and third, winter protection.

In most places the Bees will have another month of natural gathering from the fields. If they are not vigorous and not many young bees and have a failing Queen, the hive should be re-queened.

Commercial Bee-keepers re-queen every year but others generally only once in two years. An old queen will not lay vigorously at this time of year. As the life of a worker bee is 6-8 weeks, generally speaking from April 15 to August 15. So that if there are not young bees in the hive these older ones will die off during the winter and none to start the spring work. The young bees emerging at this time of the year will live through the winter and start the spring work, during the fruit bloom season.

As to the amount of stores:—there should be 100 pounds from August first to May first, to care for the hive. They will be able to gather from the fields from August first to freezing from 30 to 40 pounds and the keeper should see that they are supplied with 40 to 60 pounds at the last check up.

If they have not the proper amount of stores they should be fed a sugar syrup which is made from equal parts of water and granulated sugar. It may be made by volume or weight.

The method for making the sugar syrup is: Have your water boiling hot, to this add, 1 teaspoon of Tartaric acid, stirred into the hot water, for each 20 lbs. of sugar used. When

Alfalfa Molasses Silage

For the month of August, the School herd was fed in the barn using alfalfa-molasses silage for all the roughage with very satisfactory results. Grain was fed in addition to the alfalfa-molasses silage to those cows producing in excess of 30 pounds of milk daily. Production was maintained, even slightly increased with some cows.

The alfalfa was cut and hauled green to the cutter without allowing it to wilt or dry out. No more was cut than could be handled in the same day. The barrel of molasses was placed on a table near the cutter, and the flow regulated by a valve screwed on an inch and a half pipe which in turn was screwed into a hole bored in the head of the barrel. A small hole was bored in the top of the barrel to admit air. The molasses flowed into the litter pan, which is below the lower feed roll, and from there into the blower housing where it was mixed with the alfalfa.

We planned to mix 75 pound molasses with each ton of green material. To get this amount, we regulated the flow of molasses to fill a quart bottle in 50 seconds, at this rate one ton of green material should be unloaded in 20 minutes. Since one gallon of molasses weighs about 12.5 pounds, six gallons or 24 quarts would weigh 75 pounds, to adjust the rate of feeding the cutter to the flow of molasses multiply 50 seconds by 24, which is 20 minutes. Good silage can be made by using more molasses per ton than 75 pounds. Perhaps less than 75 pounds per ton can be used and still make good silage, we do not know.

Some advantages of alfalfa-molasses silage are; (1) the difficulty of curing first cutting alfalfa is eliminated, (2) the product is eaten up clean by the cows, there are no coarse stems refused, (3) alfalfa-molasses silage fills in lack of good, late, summer pasture, (4) with the present price of molasses it is economical feed, and (5) there is no danger of loss due to spoiling in curing or by spontaneous combustion.

George A. Cooley

this is dissolved add your sugar and stir until dissolved.

Do Not under any circumstances allow the syrup to SCORCH as scorched syrup is POISONOUS to Bees.

G. A. Meigs

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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Secretary, R. H. Campbell Topsfield

CALENDAR

- Oct. 1—Return of Advance Students,
(Agri. Dept.)
Oct. 8, 9, 10—Fall Flower Show, in
the School Assembly hall.
Oct. 13—Mrs. Morley, organization
of leaders' groups.
Oct. 14, 15—Junior Market trip.
Oct. 15—Senior Field Day.
October—Annual Essex Co. Poultry
Assoc. Meeting. Date to be
announced.

THE NEW YEAR

Along with the many other schools
and academies, this school has en-
tered upon the new year. We record
somewhat over 150 new students com-
ing from all sections of Essex Coun-
ty. This new student body is about
equally divided between the Agricul-
tural and the Homemaking Depart-
ments.

The inspiring feature about this
work is that each student has come
because he anticipates some very defi-
nite help in the department in which
he has elected to enroll. Elective
schools and courses should serve the
interests of youth today better than
ever before.

We greet these new students and
our entire organization is pledged to
give them the most helpful instruc-
tion within our power.

FOOTBALL SCHEDULE

The Football team has a few games
already lined up and with seven or
eight veterans besides ten or twelve
first class subs back this year, Coach
Coughig is looking for a good team.
The schedule follows:

- Oct. 8—At Peabody
Oct. 13—At Wentworth
Oct. 22—Open
Oct. 29—Open
Nov. 5—At Worcester Trade
Nov. 12—At Stockbridge
Nov. 20—Open
Nov. 25—At Methuen

NEW STUDENTS

The School has another large class
entering this fall, with seventy-four
girls and seventy-five boys enrolled.
Of these the largest number come
from the cities with thirteen girls and
six boys from Lawrence and thirteen
boys and five girls from Lynn. There
are nineteen towns and eight cities
of the County represented in the total
enrollment.

Those in the Homemaking depart-
ment are: Helen G. Corliss, Andover;
Grace E. Mann, Lucille Peltier, Ames-
bury; Marjorie White, Carolyn H.
Walker, Winona C. Kennedy, Esther
MacKenzie, and Eileen DeTour, Bev-
erly; Annette B. Meigs, Ruth E. Call,
Marjorie Loveys, Danvers; Vivian O.
Timm, Susan Ellery, Annisquam,
Margaret Eruien, Pigeon Cove; Edith
Boissonneault, Hathorne; Margaret
Lawler, Alberta Redlon, Haverhill;
Grace Hinchcliffe, Ada E. Nief, Isa-
belle Noone, Madelyne M. Torrema;
Rita Morrison, Olive Judge, Marjorie
Morrison, Gertrude Hennessy, Mar-
guerite J. Donahue, Patricia Taunton,
Madelyn O. Cady, Hattie Martin,
Carolyn Fitch, Virginia Donovan,
Lawrence; Ruth Nygren, Phyllis Cot-
ter, Helen L. Baker, Eleanor Flaher-
ty, Clara F. Goodwin, Lynn; Doris L.
Frederick, Dorothy Goodwin, Edith
Campbell, Marblehead; Dorothy A.
Doerr, Eleanor Taylor, Dorothy Har-
ris, Alice Cadoret, Pauline Graichen,
Methuen; Nathalie Sheldon, Middle-
ton; Ruth L. Poland, Alice M. Ayers,
Newburyport; Elsa C. Ljunggren, Ra-
chel J. Kruschwitz, North Andover;
Marilyn F. Peabody, Ruth Woelfel,
Patricia Sheehy, Marguerite Reid,
Ruth Kenaley, Patricia Fitzmaurice,
Mary E. Anderson, Elinor J. Cheney,
Mary Maklae, Peabody; Barbara
Gage, Rowley; Frances Woodhouse,
Rita Ouellette, Helen Ouellette, Mary
Munroe, Marie Jacques, Betty Barrie
Salem; Alma E. Moore, Salisbury;
Marie G. Spinney, June H. Agersea,
June Blaisdell, Salisbury; Winifred
Nickerson, Wakefield; Carolyn E.
Ordway, West Newbury; Louise
Leach, West Peabody; and Cecile M.
Cheney, and Ruth Dyer, Lynnfield.

Those in the Agricultural courses
are Francis Golden, William H. Gold-
en, Andover; Robert D. Perry, Bal-

lardvale; Leslie A. Allen, Donald A.
Aldrich, Clarence Munroe, Beverly;
Robert E. Chabot, Jr., Bradford;
Robert Harlow, Thomas A. Leahy, By-
field; Harold Jones, John Neary, Dan-
vers; Austin Shorten, John E. Adams,
Georgetown; Wallace E. Brown, Glou-
cester; Leo Hunt, Groveland; Marland
Rivers, Algerd Ramaika, Horace O.
Dalrymple, Haverhill; Paul Bannon,
Ipswich; Clyde M. Hart, Roland La-
Rochelle, Charles H. Harrington,
George F. Banks, John A. Carey,
Emile St. Pierre, Paul S. Ryan, Law-
rence; Robert Bowley, John McDon-
ald, William French, William Hang-
lin, Edward Mitchell, Jr., James Gil-
more, Joseph Scouller, Robert Nichols,
Albert Paige, Herbert Hayward, War-
ren F. French, James Mathews, John
E. Broderick, Lynn; Frank O. Lane,
Howard Gott, Manchester; T. Joseph
Roche, Harold Pierce, Marblehead;
Robert Worsman, Ernest Robinson,
Martin Sevoian, James Malley, Rob-
ert F. Jackson, Haig Parnagian, Meth-
uen; William Hocter, Raymond
Clark, Middleton; W. Carl Smith, Na-
hant; James F. Nugent, John W.
Coskery, Norman Lucy, Gordon Pin-
gree, Newburyport; James Curtin,
William Holt, North Andover; David
Aylward, Jr., Leslie McEwen, Joseph
Waters, Peabody; Donald B. Herron,
Henry T. Cecelski, Robert J. Cross-
man, Stafford Knight, Edward B. Cro-
teau, Robert MacAfee, David Irons,
Thomas Owens, Alden F. Moreland,
Salem; Edward Bosse, Saugus; Ken-
neth C. Winsor, Swampscott; Gerald
Titus, Topsfield, Esmund Richard, Jr.
Wenham; Stewart Chase, West Pea-
body.

POULTRY

(Continued from page 1)

Several factors have been involved
in the increased flock production.
Briefly we may include improvement
through breeding, improved feeds,
some housing alterations and improv-
ed managerial practices such as the
use of the barracks system. In addi-
tion, for the year of 1937 much credit
must be given to foreman Gordon
Hall of the class of 1936, who has
been ably assisted this summer by
student Henry Smith of Saugus of
the class of 1937. These two boys
have done a splendid job, and their
continued interest and application
have contributed in no small measure
to this year's good record.

J. Stanley Bennett

DECIDE ON NAME FOR PINE

For many years one of the well-
known species of the extensive pine
family has been referred to by one of
two common names, Norway or red
pine. As it is really a native of this
country, growing in the Northeastern
and Lake States, the Forest Service,
United States Department of Agricul-
ture, will henceforth refer to it as
red pine.

This tree is fairly common in Essex
County, being found in Topsfield and
the towns of the northern part of the
County.

SOIL CONSERVATION

INSPECTION STARTS

Those farmers who desire to benefit under the Federal Soil Conservation Act and who have already performed all practices they planned for 1937 should so notify Conservation Agent C. S. Moxeley, according to a statement by County Agent Francis C. Smith, who represents the Secretary of Agriculture in Essex County.

The County Committee of farmers consists of Melville Grey, Wenham, chairman; and Harry Cole, Boxford; with Joseph Smith, Lynnfield. This group met recently and engaged an extra field inspector in order to handle the large number of estimated requests for inspection.

This committee estimates that farmers of Essex County will receive about \$20,000 in 1937 from these benefit payments.

MOUSE CONTROL

DEMONSTRATIONS

Investigations by the U. S. Biological Survey in the Department of Agriculture into the life and activities of the field mice and other mice found in fruit orchards in New England have resulted in identification of the type causing the trouble and methods of safely preventing such damage have now been developed.

County Agent F. C. Smith is arranging field demonstrations to show how and what to use to get rid of these pests. Orchardists who are interested should contact him at the Essex County Agricultural School, Hathorne, Mass.

CASH FARM INCOME UP!

The U. S. Department of Agriculture state that the total Farm income of the U. S. 1937 will top nine billion dollars. This will nearly equal the 1929 figure. This figure is more than double the 1932 figure of 4.3 billion dollars.

1929	\$10,479,000,000
1930	8,451,000,000
1931	5,899,000,000
1932	4,328,000,000
1933	5,117,000,000
1934	6,348,000,000
1935	7,090,000,000
1936	7,865,000,000
1937	9,000,000,000

FARMER IS RECEIVING MORE

Now gets 47c for food dollar—in 1932 he got only 33c and 42c in 1935. In 1936 it was 44c.

The average during 1913 to 1920 was 55 cents. Since the World War the labor costs of distribution have risen and reduced the labor return of the farmers.

APPRENTICE TEACHERS

Stanley H. Wiggan of Newton Center has begun his duties as apprentice teacher in the Agriculture department for the current school year. Mr. Wiggan will assist in Dairying, Dairy Science and Mathematics. After a period of practice teaching he will continue his collegiate work at the Massachusetts State College.

Miss Louise R. Bates of Islington, Mass., a graduate of Framingham State Teacher's College '37 is the apprentice teacher in the Homemaking Department for the current year. She will teach Freshman Foods and Clothing and Junior Handicraft as well as assist in other classes.

Miss Mary McNamara of Peabody, a graduate of Posse, succeeds Mrs. Beatrice Couhig of Danvers as Physical Education instructor for the girls in the Homemaking Department.

MARRIAGES

Miss Elizabeth Houston MacGibbon of Bradford was married in August to George Sigurd Nelson of Concord, New Hampshire, at the home of the bride's grandmother, Mrs. William Houston, Haverhill.

Both young people graduated from the Essex County Agricultural school class of 1935. They will reside in Concord, New Hampshire.

Miss Hilda Tipert of Danvers and a member of the office staff of the school was married this summer to Otis Evans of Middleton. Mr. Evans is a graduate of the School, class of 1926.

Miss Elizabeth Weston who for the past six years has been editing this magazine was married September 12, at Randolph, New Hampshire, to Paul C. Bunker of Lancaster, Pennsylvania. Mr. Bunker is associated with the Advertising department of the Armstrong Co., in Lancaster.

Miss Thelma Healey, daughter of Mr. and Mrs. D. S. Healey, of 24 Hawthorne Street, Lynn, was married a few days ago to E. W. Fuller, Assistant Engineer of American Airlines, Inc., and son of Mr. and Mrs. Amos L. Fuller, 1426 Boulevard N. E. Atlanta, Georgia. They were married at Hilton Thorndyke Chapel of the University of Chicago by Rev. E. C. Cox of Drexel Park Presbyterian church.

Mr. Fuller is a graduate of the Engineering school of Georgia Tech., class of 1932. Miss Healey graduated from Fryeburg Academy, Fryeburg, Maine, Essex Agricultural School class of 1933, Salem Hospital Training school, and has been Stewardess of American Airlines.

Grapes make excellent jelly, but it is better to use them slightly under-ripe. They combine very well with apples and this prevents any possibility of crystallization. Many types of jams, butters and marmalades with grapes as a foundation are excellent. The following one is very good recipe.

GARDEN CHAT

How Should Vegetables be Prepared for Exhibits?

The days for oversize or freak specimens are over. Today one should consider four points in selecting vegetables for exhibiting; trueness to type, uniformity, condition, and quality.

Only one variety should be shown in a plate or class and they should show characteristics of that variety. The vegetables should be all the same size, shape, and have the same degree of color in each lot. All specimens should be free from disease, insect or mechanical injury. When you consider quality you should have in mind over and under size specimens. They should be of average size, neither over ripe or too green, too coarse or immature.

Potatoes should never be washed, merely rub dirt off with a soft cloth so as not to bruise. Peppers should always have stems on; tomatoes, stems off. Beets, carrots and other roots should have about 1½" of top left on root and no damage to tap root. Onions should have roots on. Cabbage should have one outer leaf left on head. Squash and pumpkins should have stems left on.

When you are entering vegetables in a contest be sure that you read entry instructions and enter the right number of specimens per class that rules call for. Be sure to get your entries in on time. While the Judge is placing the classes of vegetables, don't trouble him with questions.

Cover crops should be planted now with rye as a satisfactory choice. Plant at rate of 1½ bushel per acre. Broadcast the seed and rake or harrow in.

C. M. Stearns

OFFICE NOTES

Miss Ursula Busineau of Middleton and a member of the office staff has resigned to accept a position with Nestor Hall Co., of Boston.

Miss Marion Bettencourt of Beverly, has taken Miss Busineau's place in the office.

Miss Madeleine R. Torrey of Beverly, has taken Miss Elizabeth Weston's place on the Essex Farmer and Homemaker.

Mrs. Ruth D. Morley, State Parental Education Specialist is to work in Essex County this fall. Starting early in October in co-operation with Parent-Teacher's Associations and other organizations.

Anyone interested, communicate with Mrs. Mary McIntire, Extension Dept. Essex Agricultural School, Hathorne, Mass.

Grape Conserve

1 small basket grapes, cook with a little water and strain. This should give 3 pints of juice if water is not added. 3 lbs. sugar, 1 lb. raisins, chopped; cook 20 minutes. Add nuts. (1 lb.) after it is cooked. Lemon and orange adds to flavor.

SUMMER CAMP PROJECTS

Among the many interesting projects which the girls in the Home-making Department pursued during the summer months were those that afforded experience in some part of summer camp detail.

Charlotte Moore of Salisbury and Elizabeth Pyburn of Peabody, were at Munasaka Camp, Westford, the Lowell Y. W. C. A. camp. They planned the menus for a week at a time, made out the grocery list twice a week, and prepared all the food. Each group of girls included about twenty campers.

Margaret Spinney of Saugus was at the Out-door Day Camp at Marblehead, where there were nearly forty boys and girls from six to twelve years of age. Margaret had charge of the daily luncheons. This meant planning menus, purchasing supplies, preparing and serving. She also assisted with the handicraft work. The girls made dolls and the boys notebooks, later work with sealing wax. Because she was qualified she taught swimming, also.

Winifred McKay of Byfield, Anna Bennertt, Methuen; and Olive Purdy, Ipswich; were at Masconomo Camp, Kingston, New Hampshire, the Newburyport Y. W. C. A. camp. Their work was similar to that of the other girls, preparing menus, ordering and cooking for 35 girls, from six to sixteen years old. Olive had charge of the girls who prepared the vegetables and did other kitchen activities.

At the Lawrence Y. W. C. A. Camp, Fort Pond, Leominster, Irene Snell and Priscilla Hopkins, both of Beverly, had complete charge of the planning, ordering and preparation of all food. They had two groups, the first of the season, forty-four girls from eight to sixteen years old. The latter a group of Leominster Girl Scouts from ten to seventeen in age.

At Lake Winnepesaukee, Meridith, New Hampshire, is Camp Anawan where Ellen McDonnell, Marblehead, and Edith Moody, Methuen, spent the summer. They had the care of the dining room, charge of serving, which was cafeteria style. About one hundred girls between the ages of seven and sixteen were served daily.

Miss Ethel Barry of Danvers, Director of Kamp Kim, Angle Pond, Kingston, New Hampshire, had Elsa Robblee of Salisbury, as one of her camp workers. Elsa had charge of the food for 25 girls and the counsellors. She and Miss Barry planned the meals and in addition to the cooking she also had charge of the girls who prepared the vegetables for her.

There were awards for the neatest girl, the girl in sports and the best swimmer, but the hardest won and most coveted award was that for the good camper who had the best "camp spirit."

FALL PRESERVING

It isn't too late to make some delicious relishes and pickles which will be much appreciated next winter. You might have some difficulty getting green cucumbers but ripe ones are available and cost almost nothing. They make delicious pickle which resembles melon rind pickle.

All ingredients for Potsfield pickle are available easily and it is a favorite type with many people. I feel sure you would enjoy it if you haven't tried it before. It is rather a sweet pickle.

Potsfield Pickle

3 lbs. green tomatoes
3 lbs. ripe tomatoes
1 small cabbage
½ cup salt
3 red peppers
2 bunches celery
1 quart onions
Let stand overnight and drain
3 pts. vinegar
½ Tbsp. mustard seed
2 lbs. sugar
2 Tbsp. mixed whole spice
Tied in a bag
Cook together about 2 hours, pack in jars and seal.

R. E.

STATE GRANGE AWARDS

The Massachusetts State Grange has awarded two prizes of \$10.00 and \$5.00 each in connection with the 1936-1937 public speaking contests.

George Hibbard, a pupil in Hopkins Academy Vocational Agricultural Department, Hadley, Mass., was the winner of the \$10.00 prize.

Roland Cullenberg, a pupil in Bristol County Agricultural School, Segreganset, received the \$5.00 prize.

Hibbard will represent Massachusetts Farmers of America, in the Regional Public Speaking contest, Thursday, September 23, in the Old Church of the New England Village on the grounds of the Eastern States Exposition.

Of interest to Essex County is the fact that Norbert White of Ipswich, a senior at E. C. A. S. placed ahead of Hibbard and Cullenberg in the State Contest but is ineligible to compete at Springfield, as he became 21 years of age in June.

GRADUATION

TUESDAY,

NOVEMBER 23

What excellent environment, experience, and opportunity for the Essex Aggie girls!

V. L. C.

4-H RADIO PROGRAM

On September 11, Paul Corson and Russell Gould of Saugus and County 4-H Club Agent Horace J. Shute, gave a very interesting talk on the work of the 4-H Clubs of the County over Radio station WHDH at 12.45.

They told of the work in preparing the exhibits for the various fairs in the state. These exhibits in the 4-H departments of the fairs are produced by boys and girls under the age of 21 years, and for the most part between the ages of 12 and 16.

They had a large exhibit at the County Fair at Topsfield, as well as at Brockton, Northampton, and Eastern States Exposition at Springfield.

At the Essex County Fair the exhibit covered 2000 square feet and consisted of clothing, food, canning, gardening, homecraft, forestry, besides a large exhibit of poultry.

Some of the girls entered a Sewing machine contest at the Brockton Fair. These girls had to make an article and take it to the fair, where it was judged. Then they went to the fair and made an article, starting with a pattern, doing all of the work on an electric sewing machine. The winner of this contest was awarded a brand new electric sewing machine.

At Topsfield Fair some of the older girls ran a dining room and lunch counter. At Eastern States Exposition they had a lunch counter and demonstration booth showing all phases of 4-H work.

Five Essex County club members were delegates to Camp Vail at Eastern States Exposition, they were: Fred Usher, of Danvers; Dena and Anna Bulgarris of Byfield, Ruth Irene Wadsworth and Paul Corson of Saugus.

The Haverhill 4-H Forestry Club under the leadership of Lionel Lambert, have their log cabin nearly completed and are planning to hold their meetings in it this winter. This log cabin is on a 70 acre woodlot. They propose to put out many feeding stations and shelters for birds in their conservation program.

MOTION PICTURES

In May 1936 a start was made in the taking of motion pictures at the school. With the aid of student Peer P. Johnson Jr. of Beverly and Instructor Charles Quimby of the Norfolk County Aggie School we now have six hundred feet of film showing the buildings and campus as well as students at work on the school farm. The progress of the Athletic field has been followed and the pictures recall the early stages of the work. During the fall and winter months the film will be available to Granges and other Essex County organizations.

ESSEX FARMER AND HOME MAKER

VOL. 19

HATHORNE, MASS., OCTOBER, 1937

NO. 10

Miss Parmenter Steps Out!

A few years ago the school started trapnest and pedigree work with a flock of miscellaneous background, to get information and to start a breeding program.

As a consequence, the number of 200 egg birds increased steadily. About five years ago one individual produced 285 eggs in a year, although her egg was not well shaped. Much higher individual records are not uncommon but the possibilities of our ever exceeding it seemed discouraging after several years of general progress.

"All things come to him who waits" 'tis said, and we had certainly waited. To every pedigree breeder there is a fascination each year when putting eggs into the incubator. Will that egg you hold in your hand develop into a remarkable individual which will reach a new high mark? Or will it be just another ordinary individual? Or perhaps a gawky rooster? Or perhaps not even hatched at all! But potentially it is something better than the best.

In February 1936 a shipment of hatching eggs arrived from the farm of Ernest Parmenter of Franklin, Mass. Many of those eggs were from older birds of known performance, but more from little ladies whose possibilities were not yet known. They were there on the strength of their parents' records and the eggs from a daughter of the lowliest of these showed 221 as her heritage. On March 2nd, five chicks hatched from this daughter, were placed with about 300 other chickens of the same hatch. All went through the normal brooding and range period and in September when housing time arrived there were four sisters and one brother from the original five. All of the sisters started to lay at the same time and got away to a good start in September. In October one sister decided to take a rest and she rested so well for the next two or three months that she suffered the ignominy of being removed from the "select" in March. Two of the remaining three continued to do creditably while the third did even better. Month after month this little lady produced without rest, through an epidemic of colds in the fall, through a damp changeable winter, through blistering hot days in July and August when others died from the heat, through September when she had completed a year of gruelling work with never less than 24 eggs in

You Can Help Prevent Dutch Elm Disease In Massachusetts

Although the Dutch Elm Disease has not been found in Massachusetts it has advanced to within 50 miles of our State line.

The principal carrier of this disease is a European elm bark beetle, *Scolytus Multistriatus*. This beetle has been found prevalent in eastern Massachusetts from the New Hampshire State line south to Plymouth and from the coast west near the eastern border of Worcester County.

The Federal Government advises the destruction of the beetles breeding places which are located in the bark on the dying and dead parts of elm trees and also on elm logs as well. The beetles can be recognized as being shiny black, stout, cylindrical and from 1-10 to 1-8 of an inch long. They work on the inner bark and the outer sapwood. The first sign of attacks are collections of reddish bark sawdust, produced by the beetles as they enter the trees.

The cultural and tree-trimming operations carried on by many towns and various private citizens in the state serve as helpful means in the prevention of this potent disease. All such material should be destroyed at once. Thus by cooperating closely with the State and Federal authorities we can help keep this dreaded disease from our state.

Office of Experiment Station Entomologist, Mass. State College.

By weight, milk contains a larger percentage of solid matter than any of the following vegetables: spinach, beets, carrots, squash, turnips, cabbage, radishes, cauliflower, tomatoes, asparagus, celery, lettuce, and cucumbers.

any month and reaching 28 in March. On September 10, she delivered her 300th egg, and added four more before her year was completed. Not content with that she has laid 323 eggs up to the 10th. of October. Just what does this mean? Almost a case of eggs from one hen; six or seven times her own weight in eggs; potentially she has reproduced herself over 300 times in a single year. Putting into every egg all the elements needed to create a new life and sustain it for a week! Pardon us if we get a bit sentimental and speak of her as "Miss Parmenter" instead of P129!

J. Stanley Benent

A Gift To The School

The School has just received a very valuable gift from Mr. Fred H. Walker of Salem. It is a collection of butterflies, moths and bumblebees of Essex County. There are over 2000 specimens which have been carefully mounted and classified. They are in two cabinets containing thirty-six drawers. In addition there is a six drawer card index, a check list and miscellaneous books and material pertaining to the collection.

The Trustees passed a unanimous vote of thanks for this wonderful gift. The collection has been installed in the room adjacent to the Library and will be used for comparison, in fact as a measuring stick, as it were, for all the collections of coming students who wish to pursue their studies in entomology a little further.

Mr. Walker was 15 years collecting with net, bottle and light trap this collection. He was assisted by his two sons, one of whom Fred H. Walker, Jr., graduated from the School class of 1927 and later graduated from the State University in Kansas, majoring in Entomology. Mr. Walker, Sr., is treasurer of "Psyche" a Journal of Entomology, at the Institute of Biology, at Harvard University.

SOIL CONSERVATION

The farmers of Essex County who have participated in carrying out some of the practices under the 1937 Soil Conservation Program are being checked to ascertain the amount of money they have earned by co-operating. It is gratifying to note the improvement in the seedings of clover which were made in 1936 where lime and approved clover mixtures were used. We believe the program has been a great assistance to the farmer for improvement of his grass and pasture lands. Did you see our model farm at the Topsfield Fair? It created a lot of interest. To date there have been three hundred farmers who have been inspected. There are three trained supervisors making the check up.

C. S. Moxley

GRADUATION ESSAY

Irene Snell of Beverly has been chosen because of her scholastic record to be the speaker to represent the Homemaking department at the Graduation exercise in November. Her essay will be centered about her project of last summer which was spent at Camp Mayanuk. Since the choice has just been made the account in the November issue of this

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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Essex County Poultry Association
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Eastern Massachusetts Society
of Beekeepers Cliftondale
Secretary, E. S. Hatcher
Essex County Milk Goat Breeders'
Association
Secretary, R. H. Campbell Topsfield

CALENDAR

- Oct. 20—Annual Essex Co. Poultry
Assoc. Meeting, 6.30 P. M.
Nov. 2—Conf. for Leaders at State
College.
Subject, Christmas Greens.
Nov. 13-17—The 13th Annual Science
Exposition.
Nov. 17-19—Annual Mass. Poultry
Breeder's School.
State College, Amherst.
Nov. 23—Graduation at Peabody In-
stitute, Danvers.
Class of 1917 will have their 20th
Reunion.
Alumni Meeting, Banquet, Dance.
Dec. 8, 9 and 10—Christmas Decora-
tions Show.

FOOTBALL SCHEDULE

- Oct. 13 at Wentworth 7-0.
Oct. 22 Tufts Jr. Var. at St. John's
Stadium.
Oct. 29 at Hudson, eve. game.
Nov. 5 at Worcester Trade.
Nov. 12 at Stockbridge.
Nov. 19 at St. John's Jr. Var.
Nov. 25 at Methuen.

FALL EXTENSION PROJECTS

Four Foods classes have been or-
ganized in the County this fall. These
classes are meeting under the direc-
tion of Mrs. Mildred G. Snell, in the
Laboratory of the Homemaking
School, Hathorne, on Monday eve-
nings October 11, 18, and 27; Novem-
ber 1, 8, 15, 22, and 29; December 6
and 11. Pupils have registered from
Middleton, Lynn, Danvers, Peabody
and Lynnfield.

Tuesday afternoon class is meet-
ing in the kitchen of the Congrega-
tional church in West Boxford Octo-
ber 5, 19, 26; November 2, 9, 16, 23,
and 30; December 7 and 14. Mrs. Ma-
ry Andrews is chairman.

Wednesday afternoon classes at the
Hobbs Memorial Building, in Marble-
head, October 6, 13, 20, 27; Novem-
ber 3, 10, 17, 27; December 1 and 8,
Mrs. George C. Carruth, chairman.

Thursday morning classes, in New-
bury Grange hall, October 14, 21, 28;
November 4, 11, 18; December 2, 9,
16 and 23; about seventy women have
registered for these classes.

The Home Nursing groups with
Mrs. Mary E. Roundy, R. N. in charge
are meeting Monday evenings, in the
Homemaking building of the School,
Hathorne, on the same dates as the
Foods class.

The Tuesday class meets in Essex
at the home of Mrs. Ada Boutchie,
evenings of October 26, November 2,
9, 16, 23, 30; December 7, 14; 21 and
28, Mrs. Sadie Jones is chairman.

Wednesday evenings: Bell's Studio,
Salem, October 13, 20, 27; November
3, 10, 17, 24; December 1, 8, and 15.

The Thursday evenings in Salem,
place of meeting to be announced, Dr.
Margaret Welch is chairman.

The Thursday afternoon classes at
the North Salem Library, October 8,
15, 22, 29; November 5, 12, 19, 26;
December 3 and 10, with a registra-
tion of 80. Mrs. Charles F. Ropes is
chairman.

The Clothing groups under the lea-
dership of Mrs. Mary M. McIntire
are meeting in the Hobbs Memorial
hall on Tuesday and Thursdays, dur-
ing October and November. In the
Swampscott Visiting Nurses rooms,
Columbia Road on Thursday evenings,
and the Thursday morning class at
the Essex County Sanatorium.

The Upholstering class will meet
Friday afternoons at the Essex Coun-
ty Agricultural school, Hathorne.

Mrs. Ruth Morley, State Parental
Education Specialist, is meeting once
a month with a leaders group at the
Essex County Agricultural school
during October, November, Decem-
ber, and January. Leaders from New-
bury, Middleton, Clifton, Salem, Bev-
erly, Swampscott, Saugus, Clifton-
dale, Boxford, Groveland and Glou-
cester are attending these meetings.

WANTED

The Federal Commodity Co-opera-
tive office in Concord, Mass. is in the
market for Macintosh and Baldwin
apples. They will pay 50 cents per
crate, in lots of 50 crates minimum.
Crates are returnable. Utility size
2 1/4 inches up.

If interested, get in touch with the
above Co-operative or your County
Agent.

RURAL ELECTRIFICATION

Rural electrification reports Mass-
achusetts was 63.5% of all farms
electrified. California comes higher
with 79.5%; District of Columbia
74.4% and little Rhode Island 90.6%.
New Hampshire has made an excel-
lent showing with 65.5%; Vermont
only 33.5%; Maine 45.5% and New
York 48.9%.

POTATO CONTROL WINS

The recent potato control referen-
dum in Essex County indicated 208
commercial potato growers handling
150 bushels or more. Very few voted,
15 were in favor of control and 4
against.

In the State of Maine, a vote of
growers was overwhelmingly in favor
of control. Of course one would ex-
pect this, with a large crop there
bringing around 20 cents a bushel.

MANURE

One of the most valuable and least
appreciated of the by-products of the
dairy farm is the manure. Do you
realize that a year's supply of ma-
nure from the average 20 cow dairy
farm has a crop producing value of
\$500 in terms of present fertilizer
prices. By adding superphosphate to
the manure—one pound per cow per
day in the gutters—retains the ni-
trogen, and builds up the proper bal-
ance of the plant food ingredients in
the manure. Where the manure thus
treated is used as a top dressing on
hay land or harrowed in for new
seeding then the phosphoric acid in
the superphosphate so used is worth
4 cents per pound under the Federal
soil conservation. The crop producing
value of manure often is doubled by
thus adding superphosphate to it, 40
to 50 pounds per ton, a pail full to the
spreader load.

Francis C. Smith, County Agent

FIRST ECHO CLUB MEETING

The first meeting of the Club will
be held on Thursday, October 21, in
the Assembly Hall in the Homemak-
ing Building. The program is in
charge of the program committee
whose chairman is Edith Moody.

"Among the Araucanians" will be
shown and three students from the
senior history class will supply the
historical background. Those taking
part are Ellen Wills of Ipswich, Edith
Moody of Methuen and Marcelle Ber-
wick of Methuen.

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

OCTOBER, 1937

STUDENT EDITORS

Homemaking Department

Margaret Spinney, '38 Saugus
Helen Corliss, '38 Andover
Isabell Noone, '38 Lawrence
Wyntha Tompkins, '38 Essex
Mary Anderson, '39 Peabody
Mildred Burke, '39 Methuen

Agricultural Department

Aubert Giles, '39 Danvers
Allan Trask, '38 Peabody
Walter Winn, Jr., '38 Methuen

F. F. A. Reporter

Leonard Duratti, '38 Swampscott

ECHO CLUB ELECTIONS

At the recent election of the Echo club the following girls were elected to offices and committee memberships for the present school year.

President Ellen Wills, '38 Ipswich
Vice-President Dorothy Doerr, '38 Methuen.

Secretary Madelyn Mathison, '38 Methuen.

Treasurer Kae McLaughlin, '38 Saugus.

The Executive Board, Alberta Redlin, '38 Haverhill; Eileen De Tour, '38 Beverly; Ruby Savage, '39 Rowley; Edith Sharp, '39 Methuen; Olive Judge, '40 Lawrence.

Athletic Committee: Marcelle Berwick, '38 No. Andover; Madelyn Cadby, '38 Lawrence; Isabell Noone, '38 Lawrence; Mary Munroe, '38 Salem; Helen Moore, '39 Salisbury; Patricia Sheehy, '39 Lawrence; June Agersea, '40 Saugus.

Budget Committee: Lilyan Dion, '38 Salem; Alice Ayers, '38 Newburyport; Ruth Kenaley, '38 Peabody; Ruth Pollard, '38 Newburyport; Lucy Grover, '39 Salem; Lois Archambault, '39 Methuen; Alma Moore, '40 Salisbury.

Program Committee: Edith Moody, '38 Methuen; Grace Mann, '38 Amesbury; Virginia Donovan, '38 Lawrence; Olive St. Pierre, '39 Salem; Wyota Purrington, '39 Salisbury; Ruth Call, '40 Danvers.

Membership Committee: Mildred Burke, '38 Methuen; Helen Lambert, '39 Lawrence; Marjorie Loveys, '38 Danvers; Hattie Martin, '38 Lawrence; Susan Ellery, '38 Annisquam; Charlotte Finn, '38 Lawrence.

The Junior A division won in the drive for club membership and dues.

GREEN and WHITE EDITORS

The members of the Green and White Editorial Board in the Homemaking Department for 1937 are as follows:

Editor-in-Chief, Grace Taylor '38, Salem

Alumni, Edith Skidmore '39, Lynn
Humor, Olive Purdy '38, Ipswich
Echo Club, Eleanor Hoelzel '38, Middleton

Exchange, Barbara Gage '38, Rowley
Art, Rita Ouellette '38, Salem
Business Managers, Ellen McDonnell '38, Marblehead, Alberta Redlin, '38, Haverhill, and Marguerite Coleman, '38, Lawrence.

These girls are chosen because of interest and ability in the particular department in which they are serving. This extra curricular duty is retained only on condition that their scholastic record is maintained in classes.

The boys on the board will be announced later because their's is on a competitive basis.

M. S.

FALL CANNING and PRESERVING

The canning and preserving done by the homemaking girls at school this fall has been limited because of lack of space for keeping the various preserves. But there has been enough to give the girls experience. Pickling has the most prominent place because the pickles are more apt to come into use throughout the year in the cafeteria.

The fruits which have been preserved are for the most part, peaches, pears and grapes which are put up in the form of jelly. Grape jelly has been used as an example of the making of jelly. There are about fifty jars of grape jelly on hand and a few jars of Ginger Pear.

As for the pickling, everyone knows that there are a great many different ways to pickle. Several of these different methods have been used here at the school. Potsfield Pickle, Bread and Butter Pickles, Mustard Pickle, Pepper Relish, and Cucumber Relish have been put up.

Vegetables are usually canned to a great extent by people who can get them easily and economically and so it is of value to know the various processes. This knowledge was gained this year in doing only a few jars of corn and tomatoes.

W. T.

ALUMNI NOTES

Virginia Larrabee of Beverly of the class of 1934 has entered Bangor Theological School this fall, to study for the ministry.

Ruth Tronerud '37 of Topsfield and Lena Hela '37 of Lawrence have entered Framingham State Teachers' College.

Olive Drew '36 of Saugus is working in Saugus Branch Telephone office.

Barbara Clark '37 of Lynn and Florence Woodbury '37 of Middleton are working in the Middleton Sanatorium.

Ruth Riley '36 of Lawrence is in training at St. John's Hospital in Lowell.

Hazel Ogden of Newburyport is working in the New England Mutual Insurance Co., Boston.

Priscilla Hopkins and Winifred McKay both of '37 are Laboratory Assistants in the Foods department at Essex Aggie.

Anna Gioco '37 of Saugus has entered the School of Practical Arts, Boston.

Bernice Ogden '33 of Newburyport entered the Training School for Nurses in the Brunswick Hospital, Brunswick, Maine, October first.

Ellen Collins '33 of Newburyport, has been employed in the Newburyport Telephone Exchange since last June.

Gertrude Lawton '36 of Methuen is working at Cherry and Webb's in the Alteration department in Lawrence.

Wallace Moreland '21 Extension Editor at College Park, New Brunswick, New Jersey, visited the School on September 13. Moreland attended Connecticut Aggie after graduating from Essex.

William Follett '33 is employed on a milk route in Haverhill.
Merritt Blake '31 of Peabody is taking a course in Diesel Engines in Boston.

Howard Manning '33 of Peabody is in the landscape business being employed by the Pearson Nurseries of Lynnfield.

William Chase '32, associate manager of the Windsor County Farmer's Exchange, visited the School recently.

Do not put soft coal ashes on garden land. They contain alkalis that are harmful to plants.

OFFICERS OF F. F. A. 1937-38

President Jacob Ranta, '38 Rockport
Vice-Pres. Allan Trask, '38 Peabody
Secretary, Joseph Arnold, '38 Gloucester
Treasurer Albert Batchelder, '38 Andover
Reporter Leonard Duratti, '38 Swampscott

Class Representatives
Senior—William Corning, Beverly
Junior—John Balzarini, Rockport
Sophomore—Richard Sturtevant, Danvers

FLOWER ARRANGEMENT

On September 23, the faculty and students of the Homemaking department enjoyed a most interesting talk by Mr. White, an instructor of Floriculture at the school. Mr. White chose as his subject "The Proper Arrangement of Flowers in the Home".

Some of the important points stated were to pick the flowers early in the morning when they was much moisture in the inner section of the flowers and stems.

When cutting the flowers, one should always remember to include the buds and foliage as it makes the bouquet more attractive. Much thought should be taken when choosing the container for the bouquet; it should harmonize with the color of the flowers and the particular type of flowers. Most flowers should be at least one and a half times as tall as the container and not too crowded as this detracts from the natural beauty of the flowers.

Flowers are usually put into a vase and placed on a table or buffet to make the room more attractive.

The flowers should be given daily care and fresh water should be changed daily so that the flowers will keep longer.

The talk was illustrated by the arrangement of flowers in all kinds and shapes of containers. These were left in the Assembly Hall for closer examination by those who were interested.

M. A. & M. B.

SHORT STORIES

The collections of short stories that were recently added to the Homemaking Library will be interesting not only to students but to the average reader. They would be an asset to the library in any home. Some are new editions and some are revisions of older editions but all are good. They are listed for those interested.

"Modern Short Stories" by Margaret Ashmun.

"Americans All" by Benjamin Heydrick.

"Short Stories for English Courses" by Rosa Mikels.

"Short Stories of Today" by Raymond Pence.

JUNIOR MARKET TRIP

The annual Junior Market Trip took place Thursday and Friday, October 14 and 15. Forty-four students accompanied by seven members of the faculty left the school late afternoon and visited the following places, Boston Regional Market, with an Open Air auction with Chester T. Dutton, Auctioneer.

First National Stores Warehouse in Somerville, then they returned to Boston where the night was spent in rooms at the Boston Fruit and Produce Exchange.

The boys were up at four o'clock in the morning with a visit to the Farmer's Curb, the "Island" on North Market street, the "Dump" on Mercantile street, State Street. Then on to the Flowers Exchange Inc., Boston Market Terminal, Boston Fruit Auction building, Wholesale Potato Market, "Maime Big Baker".

After lunch they visited the Boston Fruit and Produce Exchange with rooms in Faneuil Hall Market and watched the posting of the daily prices.

From there they visited the Wholesale commission house in butter, cheese and eggs and then to Eastern Avenue Cold Storage House of the Quincy Market Cold Storage Co. and then to Hood's plant in Charlestown.

All reported a most enjoyable time as well as profitable in an educational way.

NEWS FROM HAWAII

Mr. Gifford has kindly given us excerpts from a letter he received the other day from Joseph Andreas of the class of 1935 formerly of Beverly.

Andreas is now on the Island of Oahu, of the Hawaiian group. He says in part "We left New York by boat with stops at Panama and San Francisco. In Panama it was "plenty hot". The people there are colored folks and the price of goods is very cheap.

In describing the Island he states that the best scenery is on the east side where there is the largest amount of rainfall. Rainbows can be seen almost every day and sometimes at night. The City of Honolulu is a modern city in many respects. Apartment stores equal some of the best in the States."

Andreas is learning the plumbing and tinsmith trade and later plans to go into the poultry business on the West Coast. He believes that a poultry man can save a lot of expense if he is able to do his own plumbing.

The letter was in answer to one Mr. Gifford wrote him and sent him a copy of the Essex Farmer and Homemaker, which he appreciated greatly and wants to be sure and see each copy.

In closing he asks "How is the Athletic Field? The football team should be proud to have such a good field.

SUMMER PROJECT
ON CLOTHING

The girls, as well as boys, have had their projects to work at during the summer months and have shown their ability in what they learned in the past year. These clothing projects were brought in by girls who were last year's Freshmen and Juniors. They were closely examined by teachers and then at a recent assembly prizes were awarded to the following students by Miss Moore.

In the Junior class, Lilyan Dion, Salem, won first prize with a Persian print silk dress.

Eleanor Hoelzel, Middleton was second, having made a child's pink dress and embroidering it with blue and white, cross and feather stitch.

Geraldine Gates, Salem, was third with a brown print silk dress.

In the Freshman group, Mildred Burke, Methuen, was first, having a collection of articles, including a child's print dress and a brown linen blouse for herself.

Ada Marsland, Methuen, was second, with a turquoise blue dress trimmed with brown.

Williamena Smolak, North Andover, was third with two dresses, one being a print with contrasting blue collar, cuffs and belt, and little bow knots, the other was a pretty print dress.

H. C.

AWARDS OF THE LETTER "E"

The Faculty Committee on Student Activities is pleased to announce that the following students have been awarded the old English "E" for their extra-curricular activities during the past year.

This means a high scholastic standing and the will to sacrifice time for activities outside the everyday academic schedule.

Those in the agricultural department to receive these awards are: Walter Alley, Lynn; Joseph Arnold, Gloucester; Bruce Bawden, Amesbury; Joseph Blunda, Ipswich; *William Corning, Beverly; Percy Curtis, Rockport; Paul Day, Saugus; *Norman Everett, Lawrence; *Gilbert Freeman, Beverly; *Donald Gasper, Beverly; *Francis Gillen, Lawrence; Rhea Gosselin, Haverhill; *Merle Graffam, Lynn; **Walter Hichens, Middleton; Carroll Killillae, Nahant; John Kuenene, Amesbury; William Long, Lawrence; Leroy MacAloney, Georgetown; Archie Nimmo, Methuen; Norman Peatman, Andover; Jacob Ranta; Rockport; *Gildo Santin, Beverly; Henry Smith, Saugus; Henry Smolak and Theodore Smolak of North Andover; Clayton Teague, Marblehead; Allyn Trask, Peabody; *Warren Towne, Beverly; Phillip Webber, Middleton; Russell Wheelhold, Methuen; Norbett White, Ipswich.

* A star is awarded to those who have previously earned a letter.

** Two stars are awarded to those who have previously earned a letter and one star.

WINTER PROTECTION FOR BEES

Now is the time to make the final check up of your Bees, and prepare them for the coming winter months. There should be fifty pounds of honey to an eight frame colony, sixty pounds to a ten frame. Two stories for a colony is advantageous with either a shallow extracting super or a full depth super hive. A frame full of honey will net about five pounds.

Windy locations for bees should be avoided. Before the bees are insulated for the winter they should be moved to a sheltered location or provide a windbreak.

Insulation should be applied after the colonies are prepared for winter and before the ground freezes. The purpose of insulation is to conserve the energy of the bees so that they will be strong next spring. Packing cases are expensive but will last for many years. Asphalt paper is used extensively and is satisfactory, if properly applied. A thin black paper known as 'slaters' felt', containing 500 square feet to the roll, is one of the most economical papers to use. One roll of this will pack twenty colonies in groups of two. In addition to the slater's felt, three plasterers' laths or other thin material, six 6d. nails, binder-twine or other stout string, about six bushels of planer shavings, fine straw, and chaff or peat moss are required for each pack.

The colonies should be four to six inches from the ground. If two or more colonies are to be packed, place them in pairs, both facing toward the south or east. Set them tightly against each other. The space between the bottom boards and the ground is crowded full of packing material. The slater's felt is placed around the two colonies, standing on edge as tightly as possible against the ground. The plasterers' laths are used to nail the felt to the bottom boards, on the back and sides and closely above the entrances on the front, should have a notch $\frac{3}{8}$ " x 4" for a winter entrance and nailed over the hive entrance. This will keep out mice and retain heat. The felt must be folded, allowing plenty of room for packing material at the corners of the hives.

Four to six inches of material is packed lightly between the felt and hive sides. The top packing is placed and the felt folded over. An additional piece of felt is used for a cover. The twine is tied to projecting nails in the lath below and carried around tying the whole package securely against damage from wind. The covers of the hives should be securely placed so that mice can not enter the colonies, before the insulation is put on. Hive covers or light boards may be used on top of the final covering of felt as an additional protection against wind and rain.

George A. Meigs

PROJECT TOUR

Twenty-five students, one parent and nine instructors made up the F. F. A. tour group on August 19. Students visited, Raymond Pead, Danvers; Paul Day at Penn's Fruit and Vegetable Farm in Saugus; Nick Dilisco in Swampscott; Frank Stacey at Skinner's and Clayton Teague at Dr. Ireson's in Marblehead. Graduates visited were Albert Nunan of Saugus, Nick and Tony Fiore of Swampscott and James Skinner in Marblehead.

Steamed clams, sweet corn, hot dogs, rolls, ice cream and tonic were enjoyed at Nahant Beach Reservation. The climax of the afternoon was a baseball game between the Faculty and Students with the former winning 27-14. The yearly tour is sponsored by the Vocational Improvement committee of the Essex Chapter F. F. A.

FLOWER SHOW

The Second Annual Fall Flower Show was held in the Gymnasium and Assembly hall of the school October 8, 9 and 10. On the evening of Friday, October 8, there was an entertainment, which was largely attended by the parents and friends of the students. Mr. Seth Kelsey of the Kelsey Highlands Nurseries was the guest speaker. He spoke on "Plants for Autumn Color" and demonstrated his talk. Among the plants he used for demonstration were three new varieties of hardy asters which he gave to the Floriculture department.

During the three days over 300 people attended the Show. The members of the Floriculture Club and Echo club are to be congratulated upon the success of their show.

The judges for the affair were Mrs. Elise Cutler, designer at the Eliot Rogers Flower Shop, Gloucester; Mrs. Charles H. Haddrell of Clifton; Messrs Thomas Curran, Danvers; Archie Adamson, gardener at the State hospital, Danvers; and Harold C. Stevens of the Ropes Memorial, Salem.

Their Christmas Decorations Show will be held December 8, 9 and 10.

SCIENCE EXPOSITION

The 13th Annual Science Exposition will be held at the School November 13 to 17. The Science committee of the Essex Chapter of the Future Farmers of America is promoting this exhibition and will feature this year a series of identification contests in addition to the usual display of exhibits.

There will be specimens in the following subjects: Weeds, Trees, Vegetable Pests, Fruit Pests, Ornamental Pests, Poultry and Feed Materials.

The committee expects to present in the Fall issue of the Essex Student Scientist, detailed information concerning the Exposition.

The Exposition will be open daily to the public free of charge. On Saturday November 13 the Exposition will be open afternoon and evening

GARDEN CHAT FOR OCTOBER

Carrot growers generally plant their Fall or late crop around the 5th of June, when they plan to sow seed rather thickly. Thinning is practiced at about 2 inches and when planted this early a heavy crop of medium sized carrots should be expected. When such a season as we've just had with dry hot weather prevailing, germination is poor and only about a half crop matures. Hence the carrots grow large and coarse because they have more space and plant food than normally. If one knew what the season's weather were to be, one could plant accordingly. For this season one should have planted a little later under the present crop conditions so that they would not have been quite as large or if planted at the same time, the seed should have been sown thicker so as to have had the carrots closer together in the row with the results of a much larger and more uniform size crop.

The owner of some tomato and celery plants has reported bad infestations of late blight. Frequent dustings of Copper Dust were reported to have been used. On investigation it was found that dustings had been made regularly enough but not properly applied. The celery plants had been dusted from one side only or dust had been applied to the tops of the plants only. This left the remainder of the plant uncovered and unprotected. The same was noted on the tomato plants, when only one side had been dusted. The other side and top new growth became badly infested with blight spores. More careful attention should be made to spraying and dusting of plants for successful control of insect and disease.

Don't forget to plow under or destroy corn stalks and stubble this Fall. A colder winter has been predicted than last year and if so we may expect less corn borer and other insects to be present next season. We must do our part, however, and destroy all weeds and stalk growth in the garden where insects might winter over.

C. M. Stearns

GREEN AND WHITE

The student editorial board of the Green and White has already begun its regular meetings which are held each Tuesday. The Green and White is the student school magazine and its first number for this current school year will appear in November. The separate department editors hold conferences as the need arises or as they may be called by the editors in charge. Grace Taylor and John Kukene. The faculty advisers are the same as last year. Misses Verna L. Clarke and Ruth Emerson and Mr. Carlton M. Stearns and Mrs. George E. Gifford.

until 9 o'clock. Sunday from 2 P. M. to 5 P. M. the other days it will be open from 3.30 to 9 P. M.

James F. Gallant

4-H CLUB NOTES

On Saturday, October 23, there will be another 4-H Radio Program on station WHDH at 12.45 with Mrs. Vera Underhill and a group of Essex County 4-H girls taking part.

October 29, the Annual Leaders meeting will be held at the school with Miss Tina Bishop in charge of the Food Training conference and Miss Marion Forbes in charge of the Home furnishing conference. The meeting opens at two o'clock.

In the evening there will be a supper for the leaders followed by the annual meeting. Mr. Lyle Ring of the State College will be in charge of the music.

November 4 at the School there will be a meeting of the State Club Leaders with Mr. Melby Brady of the State College in charge. This will be an afternoon and evening meeting with special attention to Craftwork work, metal, leather and possibly some work in leather burning. This conference is open to the public as well as leaders.

A new group has been started in Danvers with sixteen girls in the group. Mrs. Stanley Bennett wife of one of the instructors at the school is the leader. This is a Home furnishing group and they are starting the Kitchen program.

Two new groups have been started in Swampscott, with Miss Clara Kearney a Social worker in charge of organization. Mrs. Elizabeth Brown Stensrud, a graduate of the School class of 1920, is in charge of the Clothing group and Mrs. Fred Brown or Mrs. G. H. MacArthur will have charge of the Food Club.

FIVE POINTS IN BUYING

YOUR COAT

Mrs. Esther Cooley Page, extension clothing specialist at Massachusetts State College gives these five points when buying your fur coat.

Locate a reputable dealer, avoid bargain and too costly installment buying.

Second, know durability ratings of furs. Inexpensive furs are bear, muskrat and wombat. Moderate priced: beaver, otter, raccoon, fur seal, hair seal and wolverine. Expensive ones are: fisher, mink, and sea otter.

Third, buy a garment really your size.

Fourth, exterior appearance is the factor, are the pelts matched carefully, uniform in color, depth and texture of hair. Watch for dyeing or painting of the top fur.

Fifth, watch the lining, make sure it is strong and serviceable. An interlining adds to the warmth of the coat.

SILVA BROTHERS FLORISTS

Building a profitable ornamental and greenhouse business during the past seven years has been the achievement of the Silva brothers, James and Everett, of Rockport. A visit to their establishment will convince anyone of the value of vocational training for young men determined to succeed in this work.

Upon graduating from this school in 1925 James, the older of the two brothers, found employment at the Montrose Nurseries in Wakefield. Here he obtained experience growing and selling nursery stock and accumulated sufficient capital to start in for himself.

In 1930 he secured a plot of land and erected a small greenhouse. Taking his brother, who is also a graduate of the school into partnership. The Silvas have built a nursery and florist business which is among the best on the North Shore.

Many of the better gardens on the Cape have been laid out and are now being cared for by Silva Brothers. A younger brother is employed throughout the year and four extra men are needed from May to October. James does not hesitate to credit the School for the training he obtained in his chosen work.

George E. Gifford

HERB INDOORS

Parsley, chives, mint and thyme may be salvaged from an herb garden now. If this is done, the plant should be taken up carefully, the top pruned back so that it is much smaller than the roots. Then it should be planted in a window box or pots in a full sunny window, such as a window in the southeast or southwest. If raised in the kitchen during the winter season, herbs make a happy source of variety in one's menu. They may be used fresh or cooked in soup or in other ways.

MINT JELLY

Five or six sprigs of mint gives a good flavor to a small amount of jelly. Color to suit your own desires but vegetable coloring such as is available at the grocery store is very successful and absolutely flavorless and harmless.

Make as for apple jelly. After adding sugar to juice, boil five minutes. Hold bunch of mint leaves in hand and pass through and through the syrup until desired strength of mint flavor is obtained. This process takes the last three minutes of cooking. Add two tablespoons of lemon juice, color green, using vegetable green paste. Skim and turn into jelly glasses.

Ruth Emerson

HOME APPRECIATION

The greatest master-piece in the world is a home. A home is a place where at least two people love each other more than all else in the world. This place may be perfect according to all aesthetic ideals; it may be a hut or a place sheltered only by the stars.

In these days there are too many houses and too few homes. This is the result of false standards of appreciation.

All business depends on homes and homemakers, and the more a business can dissatisfy the home-makers with their physical surroundings, the greater the business. For this reason every homemaker must weigh carefully each transaction and ascertain whether or not "it will improve his domestic sanctuary, bring about a common desire, build a lovelier memory, strengthen the sacred bonds and unite the family in sharing labors, leisure, joy and sorrow."

Harriet M. Butman

Instructor in Foods and House Care

HOW TO MAKE BUTTONS

STAY PUT

"A little pin" is the difference between the right and wrong way to sew on coat and suit buttons. "The right way" will relieve the strain on fabric. The buttons will stay on "the right way", through the winter and through many cleanings. "The right way" will stem the tide of loose dangling and lost buttons.

Begin by using thread as coarse as the material will allow. Sew through the button and fabric once. Insert pin between button and fabric to make a shank. Wind thread around and around to form strong stem of the button. Remove pin. Securely fasten off thread. For unlined coat, the double button is preferable to the shank idea.

M. R. Dunn

COLOR PICTURES

Mr. William Mason of the Forbes Lithograph Manufacturing Co., Chelsea, spent several days at the school last summer, taking pictures of fruits and vegetables with the new kodachrome film. This film photographs objects in color and may be directly projected onto a screen. The films were shown to Director Smith and several members of the staff who were much impressed with Mr. Mason's work.

For years botanists have debated the question of what makes sap rise in trees. One of the latest theories is that it goes upward in the form of vapor. Only on its downward movement is the sap in liquid form.

Nearly all house plants can be propagated from cuttings rooted in clean sand. The sand should be kept moist and covered with a pane of window glass.

ESSEX FARMER AND HOME MAKER

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NO. 11

Football Notes

The Essex Aggie football squad started the season in high hopes of developing into a fine team with many high grade displacements. The time for practice has been severely curtailed however due to several factors not entirely unforeseen. A three day market trip to Boston immediately slowed up what hopes we might have had to beat the Tufts Junior Varsity although the 7-6 score in their favor is not a true description of the relative merits of the two teams, many people have been kind enough to say. The fact that all the games were played in the middle of the week or on Friday, has reduced our practice time 20 per cent, over our old time program, when we played on Saturdays.

Several mid-week dances or informal class meetings have attracted the boys more than the hard work of practice. Many judging preliminaries and reportorial duties have tended to keep several boys away at important times.

The team had a splendid trip to Hudson, ten miles from Marlboro. The night game conditions were ideal and the opposition was slowly ground under 20-0.

Then followed a game at Worcester Trade an unbeaten team which scored on us 10-0 late in the fourth period, when our stamina which should have been built up in practice suddenly disappeared.

Due to schedule re-arrangements it was necessary to play St. John's Junior Varsity on Wednesday, Nov. 10. With two or three stars hurt, we fumbled out of our chances to win by a back who has been reliable up to now by a score of 6-0. In every game the touchdowns have been made on completed forward passes, usually on the 4th down with from 7 to 15 yards to make for a first down.

The coach has had every reason to feel proud of his purely defensive line against running plays but also every reason to berate the offensive charge of an eleven which rarely makes first downs and has not the "savoir faire" to play a sure forward pass play conservatively. The next two games Stockbridge on November 16 at St. John's Field and Methuen at Methuen, Thanksgiving Day, with the game starting at 10 o'clock in the morning, will tell the story.

Philip Couhig,

Coach.

High Honors To Gilbert Freeman

High honors go to Gilbert Freeman of Beverly and a member of the graduating class at the school. He was called to New York the other week to attend the Poultry Industries Exposition, and was awarded a Silver Cup as the Best Poultry Boy in Northern division. This includes all of New England and New York.

His credentials and records of accomplishment in poultry were submitted by Instructor Stanley Bennett, head of the Poultry department at the school and approved by Rufus W. Stimson of the State department of Education.

Freeman entered the School four years ago, he manifested a keen interest in poultry raising and breeding. His business has grown to the capacity of his land. This year he raised 1700 chickens and 280 turkey poult and intends to hatch 300 chickens this fall. He has built up a private route for his eggs, dressed chickens and turkeys in Beverly and nearby towns. Doing all the work himself including the deliveries of the products enables him to get a fair return for his labor.

In spite of the many hours of work at home he has made the State Poultry judging team, held office in the State association of the F. F. A. and is the highest ranking student in this year's graduate class. Instructor Stanley Bennett has this to say "Gilbert has the personality and the background to make him a fine representative to present as the best poultry boy of the year."

STUDENT SPEAKERS

Four of the outstanding members of the graduating class will have speaking parts at the Graduation on November 23.

David F. Ellwell of Essex will have an essay "Down through the years." Irene Snell of Beverly has chosen for the title of her essay "At Camp Mayanuk." This is where Irene worked on her summer project, this past season, and her essay will be based on her experiences there.

There will also be a Dialogue by Walter Hichens of Middleton and Gilbert Freeman of Beverly.

Armistice Assembly

On Friday morning November 12, the boys of the school held their Armistice Day program in the assembly hall. The Devotional service was led by Mr. Mostrom, after which the school sang "America the Beautiful." This was followed by a recitation "In Flanders Field," given by George Banks of the Freshman class.

"Preparation on the Front Sector" was told by Instructor R. E. Knowlton and "Preparation on the Home Sector" was given by Instructor H. P. Thurlow.

Previous to the Assembly, American flags were placed in the markers on the campus in memory of the four boys from the school who gave their lives during the World War.

These boys were: Private Abram G. Fiske of Saugus. Died in Italy as the result of wounds, Sept. 3, 1918. Entered ECAS Sept. 1915, left to go to work Feb. 9, 1916 (19 years of age) Quartermaster Corps.

Private Mortimer G. Robbins of Nahant. Killed in action at Passchendaele Ridge, Belgium, Nov. 29 1917. Entered ECAS Oct. 1, 1913, left March 3, 1915 to enlist in Canadian Mounted Rifles (24 years of age.)

Private James Alexander Wood of Topsfield. Killed in action July 31, 1918 in France as a member of Co. M. 125 Infantry. Entered ECAS on Oct. 1913, left Feb. 14, 1916 to enter the army. (21 years of age.)

Band Corporal Waldo L. Stream of Gloucester. Died of disease at Coblenz, Germany, April 19, 1919. Entered the school Sept. 9, 1914. (25th year of his age at death) 16th U. S. Infantry.

COUNTY POULTRYMEN HELD ANNUAL MEETING

The annual meeting of the Essex County Poultry Association was held October 20, in the Homemaking school. In spite of the torrential rains there was a good attendance.

Harry J. Jenkins of Andover was re-elected president, J. A. Taylor of Haverhill, vice president; Ellery E. Metcalf, Saugus, treasurer; J. Stanley Bennett, Danvers, secretary. John W. Hall of Ballardvale was the new member elected to the executive committee.

Essex Farmer and Homemaker

HATHORNE, MASS.

Published Monthly by the Trustees of
the Essex County Agricultural School

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Essex County Milk Goat Breeders' Association	
Secretary, R. H. Campbell	Topsfield

CALENDAR

Nov. 19—End of term, Agricultural Department.
Nov. 23—Graduation, Alumni Meeting, Class Reunions.
Nov. 22, 23—State Extension Conf. at M. S. C.
Nov. 25—Thanksgiving Day
10 A. M. ECAS plays Methuen at Methuen.
Nov. 27—4-H Radio Talk on WHDH at 12.45.
Dec. 10, 11 and 12—Christmas Decorations Show.
Dec. 17 to Jan 3—Christmas vacation.

GRADUATION

Following the time honored custom, Graduation will be held on Tuesday, November 23. On that date the Trustees will award diplomas and certificates to 85 candidates.

As usual, the student body en masse will attend the graduation, which is to be held in Peabody Institute Hall in Danvers. The speaker to address the graduating class will be Rev. Garfield Morgan of Lynn.

After the Graduation exercises are complete, the Alumni Association takes charge of the arrangements and details. An unusual number of class re-unions are planned for this year.

NOTICE TO ALL ALUMNI

Horace J. Shute, secretary and treasurer of the Essex Aggie Alumni association has sent notices to all members of the association, regarding the annual banquet and meeting.

May we repeat that all reservations must be sent into Horace at the school office by November 20. If you have forgotten, phone Danvers 50 and make that reservation NOW.

Dinner will be served promptly at 6.30, followed by the annual meeting at eight o'clock after which dancing will be enjoyed to the rhythm of Fran Ritchie's orchestra of Lynn.

Several classes are planning their reunions, Class of 1932, their fifth; 1927, tenth; 1922 their fifteenth and the Class of 1917 which was the second class to graduate will hold their twentieth reunion. This class has planned a special feature.

A new loud speaker is being installed so that everyone will hear the excellent program which will include Mr. Hugh A. Cregg, District Attorney for Essex County.

Just in case you have forgotten who the officers of the Alumni association are at present we print them here. President, R. Burleigh Odiorne; Vice Presidents, Cliffield Sewall, Marie Murray; Secretary-Treasurer, Horace J. Shute; Executive Board, Richard Murray, Mildred Russell and Winslow Dunnells.

ALUMNI NOTES

The following graduates of the school are now employed at the school: Robert Pollock '22, is teamster, married and has four children. Thomas Gould '28 Foreman of Fruit department, Sidney Porter '34 Foreman of Vegetable department. Gordon Hall '36 Foreman of the Poultry plant.

John Natti a former student at the school, residing in Gloucester, has six hundred layers and is doing an excellent business in retailing poultry and eggs.

Chester Clinch is attending the Danvers High school.

There was an error in the last issue of the Farmer: Anna Gioco '37 North Andover is the Laboratory Assistant in the Clothing Department at the School.

Betty Hawkes '37 Saugus is the one who has entered the School of Practical Arts in Boston.

Claire Moran '36 is employed at the Fanny Farmer Shop in Salem.

When velvet becomes crushed through pressure, hold the crushed portion over a basin of hot water, lining side next to the water. The pile will soon be restored.

MUFFINS IN VARIETY

Standard Muffin Recipe
2 cups flour, 1 cup milk, 1 egg
¼ of a teaspoon salt
2 tablespoons sugar
4 teaspoons baking powder
2 tablespoons melted shortening

Mix and sift dry ingredients; to the beaten egg add the milk. Add milk mixture to dry ingredients all at once; add melted butter last and mix until smooth, but no longer. Fill greased muffin tins only two thirds full. Bake in moderate oven (400°) for 15 to 20 minutes. Recipe makes 12 muffins.

From the above standard recipe many varieties may be made by simply adding something extra to the recipe. Any one of the following additions are good.

One half cup minced crisp bacon, (omit salt)

One half cup minced cooked ham (omit salt)

One half cup grated cheese and two tablespoons milk

One half to three quarters cups chopped nuts

One cup apples chopped fine

One cup cooked dried apricots, well drained and chopped

Three quarters cup currants

Three quarter cup dates

One half cup dates and one half cup chopped nuts

One cup candied orange peel

One cup raisins

Sprinkle plain muffins with sugar and cinnamon

Other varieties may be obtained by simple process of substituting for one cup of flour any of the following:

Seven-eighths cup cornmeal

One cup graham flour

One cup ground rolled oats

One cup barley flour

One cup rye flour

One and one half cups bran

One and one half cups bread crumbs (dried and ground)

One cup cooked oatmeal

Also for one tablespoon of sugar one may substitute one tablespoon of any one of the following: brown sugar, molasses, or honey.

Bessie H. McJunkin,
Instructor in Foods and Clothing

STYLES FOR WINTER

Looking over winter clothes and fashions, there are some surprises. High necks are here again just as everything looked so favorable for low necklines. However there are some V necks. Skirts remain short and are very straight. Bodices are tight; shoulders are smooth and the sleeves are very slim all the way down. There are many shirred dresses, also simple tailored ones that fit the figure closely. There are a few two piece dresses. The popular trimmings are fringe, gold braid and slide fasteners.

Abbie Clapp

SUPPLEMENT

ESSEX FARMER AND HOMEMAKER

SCHOOL NOTES

NOVEMBER, 1937

STUDENT EDITORS

Homemaking Department

Margaret Spinney, '38 Saugus
Helen Corliss, '38 Andover
Grace Mann, '38 Amesbury
Wyntha Tompkins, '38 Essex
Mary Anderson, '39 Peabody
Mildred Burke, '39 Methuen

Agricultural Department

Aubert Giles, '39 Danvers
Allan Trask, '38 Peabody
Walter Winn, Jr., '38 Methuen

F. F. A. Reporter

Leonard Duratti, '38 Swampscott

OFFICE ASSISTANT

A new system has come into use in the Homemaking department office. Each student in the upper classes has been assigned to work in the office during some part of a specific day.

Telephone calls must be answered and recorded and visitors are greeted by the student attending the office.

No work is lost because the student may take along with her all assignments which she may do during the time which she has been assigned.

Because of this new plan, teachers near the office do not have to leave their classrooms any length of time to deliver telephone messages or to entertain visitors who may require information.

A training of this kind should prove most helpful to the students because they have real practice in answering the telephone and taking messages correctly and in receiving guests and taking care of their desires in so far as it is possible for the student. Often these are some of their duties when they are employed after they leave school.

M. A.

"AT HOME" BY THE HOMEMAKING SCHOOL

The Homemaking department of the school held an At Home, Tuesday afternoon, November 9, in observance of Education Week.

The regular classes were held but the mothers, friends and relatives were invited to attend and see their daughters at their regular school work.

About fifty signed the guest book and enjoyed the hospitality of the school. During the afternoon the class taking Foods, made sandwiches and punch and served the visitors.

GREEN AND WHITE

The student publication, Green and White, is now in the hands of the printer and should be ready for Graduation.

The agricultural members of the Editorial Board for 1937 are: Assistant Editor-in-chief, John Kukene '38 Amesbury. F. F. A. Reporter, Leonard Duratti '38 Swampscott, Albert Greenaway '39 Marblehead. Senior Editor, Sidney Johnston '38 Lynn.

Alumni, Paul Parker, '38 Topsfield. Art, George Burkhardt '39 Methuen. Jokes, Joseph Mattera '38 Lynn, Aubert Giles '39 Danvers.

Exchange, Norman Everett '38 Lawrence.

Sports, Leroy MacAloney '38 Groveland.

Typist, Robert MacAfee '40 Salem, Henry Smith '39 Saugus.

Business Managers Joseph Bergeron '38 Lawrence, Everett Milnes '38 Groveland.

A. T.

TRAVEL TALK

At a recent assembly the girls of the Homemaking school had the privilege of hearing an interesting travel talk given by Miss Ruth Emerson of the Homemaking Faculty.

The trip started from Chicago, Illinois, where the majority of cross-country trips, as well as many others start. From Chicago the tour took the group through North and South Dakota which the speaker thought were extremely barren states. She said that in some places there wasn't a house for miles. Then came the Canadian Rockies, a place long looked forward to and that certainly was enjoyed.

From the Rockies the group travelled to Banff and Lake Louise and all these places proved very worth seeing. Salt Lake City was the next of important places to be visited and the stay there was a bit longer than at some of the other places visited.

The well-known Salt Lake in this city proved very interesting but about the most interesting place visited was Yellowstone Park which was the last place of note to be visited.

Several interesting incidents were told of this place with its hot springs and geysers and of the bears that were quite numerous. Everyone enjoyed Miss Emerson's talk immensely and perhaps became a bit more anxious to travel.

V. T.

GLEE CLUB

On Wednesday, October 20, Mrs. Braddon of Danvers came to the Homemaking building, to try out girls' voices for the Glee Club and on Thursday, October 21, they started their first rehearsal. Those who were chosen for Glee Club, to sing at Graduation were: Altos: Helen Ouellette, Dorothy Goodwin, Alberta Reddon, Pauline Graichen, Alice Homans, Wyntha Tompkins, Dorothy Savage, Patricia Sheehy, Grace Taylor, Rita Ouellette, Marguerite Reid, Eleanor Yerbury, Marjorie Morrison, Ruth Nygren, Barbara Gage, Ruth Call, Marjorie White, Marilyn Peabody.

Sopranos: Annette Meigs, Winifred Nickerson, Carolyn Walker, Esther Whitaker, Eileen DeFour, Vivian Timm, Ruth Poland, Nathalie Sheldon, Marjorie Loveys, Esther MacKenzie, Frances Woodhouse, Betty Nief, Dorothy Doerr, Helen Corliss, Ruth Woolfeil, Alice Cadoret, Eleanor Taylor, Edith Boissonneault, Edith Sharp, Mildred Burke, Hazel Mason, Marcelle Berwick, Ellen Willis, Geraldine Gates, Margaret Spinney, Betty Walsh, Eleanor Hoelzel, Kathleen Hanson.

H. C.

F. F. A. ASSEMBLY

Chief Joseph Murney and Sergeant Harold Marley of the Beverly Police Department proved to be interesting speakers before the General Assembly of the F. F. A. on November 4.

Chief Murney brought out the several ways in which the police communicate with each other, namely: the wiring of pictures, teletype and two way radio.

Sergeant Marley spoke on the value of fingerprints, illustrating his talk with slides. Fingerprints are now the paramount means of identifying people. He pointed out several ways in which they are used, namely in identifying World War Veterans, bank depositors, Civil Service applicants and in establishing the guilt or innocence of incriminated persons.

PRECAUTION

We hope that none of you have thrown diseased plants into your compost pile when you clean up the garden and plan to use the compost in the spring on the garden. If you have done this, your clean-up this fall will have gone for naught.

ECHO CLUB EVENTS

Ellen Wills, president of the Echo Club opened the meeting held in October. She introduced Edith Moody, chairman of the program committee who gave the title of the movie that we were about to see and a brief background of ancient craft work in America.

She then introduced Marcelle Berwick, a senior student, who gave a brief resume of the movie and told of the work of the Araucanian Indians in the country of Chile. The movie showed the trails and a few high lights of the region with its river and waterfalls.

The picture then took us to the village in which these Indians lived. They showed how the Indians make clay pottery. They used layers of clay and put it on in layers until the jar or vase was the size they wanted. Then they put handles on it and let it dry in the sun. They showed how some women made baskets. It was skill to know just how to make the baskets so fast.

They made baskets that were very large and some were very small and were strung into a necklace. The pictures showed their customs and their ways of living. They live in houses which are made of a thatched or grass roof, supported on a few poles and there were no sides to them.

The Indians sat on the ground as they worked. They did not have modern conveniences at all. The film was not only educational but interesting.

Other Club events scheduled for the future are the Christmas Party and dance, sponsored by the girls.

The play which will be given that day is entitled "Christmas at 400 Green Street."

The faculty and members of the F. F. A. will be guests of the Girls' club.

The Budget committee has started selling Ice Cream on Monday noon and candy on Thursday noon in the Cafeteria in order to swell the treasury funds.

M. S.

DEATHS

Word was received at the school on October 21, of the passing of Mrs. G. Leonard Rippon (Ruth Frances Gay class of 1925) at her home in Brooklyn, New Hampshire. Mr. Rippon is a graduate of the school, class of 1926.

Roy H. Newhall of 75 Lynnfield street, South Peabody and a member of the class of 1925, passed away recently at the J. B. Thomas hospital. He was an expert milk tester for the State of Maine where he had been employed for the past twelve years. He was only thirty years old at his death. Besides his father he leaves two sisters and two brothers.

PRELIMINARY SCIENCE EXHIBITION

On November 1, a preliminary science exhibition for new students was held in the main assembly hall. The judges included Mr. Mostrom, Mr. Knowlton and Mr. Gifford.

There were so many winners that space will not allow listing them all so only the first prize winners as well as the class awards and the sweepstakes are listed below.

First prize winners were:

John Adams for his tree leaves.
Robert Jackson, grafting and budding.

Robert Perry, vegetable seeds.
Joseph Scouller, wood.
Francis Golden, insects and diseases.
Francis Golden, vegetable pictures.
Leslie MacEwen, weed seeds.
Robert Worsman, seeds.
David Aylward, weed seeds.
John Coskery, model poultry farm.
James Coskery and James Nugent, poultry diseases.

William Golden Jr., fruits of woody trees.

William Golden Jr., fungi.
Frank Lane, weeds and fungi.
Harold Pierce, vegetable pests.
William French, weeds and trees.
Charles Harrington, evergreens.
Robert MacAfee, fungi (diseases.)

CLASS 1A AWARDS

1. Robert Perry, vegetable seeds.
2. Joseph Scouller, wood.
3. John Adams, tree leaves.

CLASS 1B

1. Francis Golden, insects and diseases.
2. Leslie MacEwen, weed seeds.
3. Robert Worsman, ornamental seeds.

CLASS 1C

1. William Golden Jr., fruits of woody trees.
2. Frank Lane, fungi.
3. David Aylward, weed seeds.

CLASS 2X

1. Robert MacAfee, fungi (diseases)
2. William French, weeds and trees.
3. Charles Harrington, evergreens.

CLASS 2Y

1. Charles Curtin, Wallace Brown, Stafford Knight and Robert Nichols, fungi.
2. Robert Chabot and Martin Sevoian, woody plants.
3. Paul Bannon, poultry diseases.

SWEEPSTAKES

1. William Golden, fruits of woody trees.
2. Frank Lane, fungi.
3. Robert MacAfee, fungi (diseases).

W. W.

BIRTHS

Coach Philip Couhig and Mrs. Couhig are the proud parents of a son born at the Beverly hospital October 22.

ASIATIC PROBLEMS

During the last few weeks the two Junior divisions of the Homemaking department have been studying problems of the Far East under the direction of Miss Verna L. Clarke.

Not only were the war problems discussed but also the characteristics of the Chinese and the Japanese people.

Other important facts which were discussed were the reasons why Japan entered China and how other nations might become involved in the war.

The students obtained some of the necessary information from maps, magazines, and various newspapers. Newspaper clippings which stated the progress of war were pasted in Economic notebooks for later references.

Names and locations of Chinese and Japanese towns and cities were lettered on outline maps of Asia which were given to the students.

When the study of Asiatic Problems is completed the students will study the Spanish situation and follow similar study and map work.

M. A.

SENIOR GET-TOGETHER

A get-together party was held in the main assembly hall on October 26 for the Seniors of both schools and the High School Specials, so that they might all get acquainted.

The High School Specials from the Homemaking school had small green tags with their name and town printed on them. The other seniors had white tags. They walked around in an endless chain and shook hands, Mrs. Clapp being the leader. After a few games, dancing was enjoyed with two elimination dances. The winners of these were Sidney Johnston, Howard Wilson, Rita Ouellette and Alice Ayers.

The teachers who are Senior Class Advisors are Mrs. Myrtle Dunn, Mrs. Abbie Clapp from the Homemaking school and Mr. George Meigs and Mr. Miltimore of the Agricultural school.

Those on the committee were Geraldine Gates, Salem; Edith Moody, Methuen; Kay Johnson, Salem; Kae McLaughlin, Saugus; Madalyn Mathison, Methuen; Frances Carty, North Andover; Lilyan Dion, Salem; and Ellen Wills, Ipswich.

H. C. & W. W.

MARRIAGES

Phyllis Steele of the class of 1936 is now Mrs. Robert R. King. Her address is still Lakeview Park, Middleton.

Thomas A. Mortimer '34 formerly of Danvers, was married October 30, to Miss Loretta Lorette of Holyoke. They are now residing in Holyoke.

LADINO CLOVER

County Agent Francis C. Smith has made a survey and found that fifteen farmers are now growing this very desirable new clover called Ladino Clover.

It is particularly suitable for lowlands, too wet to grow anything else. Such land seeded with one or two pounds of Ladino Clover first thing in the spring or if too wet, later when dry enough to plow and re-seed, using fertilizer and a reasonable amount of lime.

Trustee Robert B. Choate has an excellent field of this pasturage, another prominent dairyman growing Ladino Clover for a number of years is Miss Jane Shattuck of Topsfield.

TURKEYS IN THE MOVIES

According to word received from the State college, the turkeys of the state have gone "hollywood." The College and the State department of Agriculture have recently released a technicolor film, showing the turkeys in all their glory.

Beginning with the egg, the life history of the birds are given to the final fadeout around the Thanksgiving table. Emphasis is given to proper growing practices and to consumer education.

G. T. Klein, extension poultry specialist at the State College said there is a growing interest in this state in raising fine birds for the holiday markets. Poultrymen are asking more and more for information to help them raise healthy birds and finish them off in fancy style. They are also asking how to kill and dress them. The film will be shown to interested groups throughout the state in answer to these questions.

The consumer will be shown how to pick out a good turkey and how to prepare one for utmost flavor. One scene shows more than 12,000 birds in a single flock.

Requests for this film may be made to the Secretary of the Extension Service, Massachusetts State College, Amherst.

TO BE FOUND IN THE DECEMBER ISSUE

A group of students with four instructors left Friday morning, November 12, for the Interscholastic Judging Contests at the State College.

The Thirteenth Annual Science Exposition opened Saturday, November 13, with Science Day, November 17.

As the Farmer is going to print before the results of these two affairs are known, the December issue will carry a detailed account of them as well as all the Graduation News.

SOIL CLINICS

Soil Clinics have been held this fall in the various counties of the state. There were 335 tests made in Middlesex and Essex County was second with 206 tests being made by Prof. Ralph Donaldson of the State College.

These tests were made in Saugus, at the Essex County Agricultural School, Gloucester, Ipswich, Haverhill, Newbury and Lawrence.

There were 67 people who attended, 55 persons brought samples of soil with 206 tests for acidity. Out of these, 81 samples showed a very acid condition; 105 other samples while not so acid still showed need of lime. Only 20 showed no need of lime.

Many other farmers who need lime might well buy and apply the lime now for several reasons. First, because there is expected to be a rush for lime in the spring and if bought now, the delivery will be prompt, Experts say that lime applied now to the ground works into the soil better than it does in the spring. Then again it is done when the rush of spring work comes along.

F. C. Smith,
County Agent

NEW OFFICERS OF THE FLORICULTURE CLUB

Howard Wilson, Jr., of Beverly who was the manager of the Fall Flower Show was elected president of the Floriculture Club for the coming year. Albert Greenaway, Marblehead, vice-president and Rhea Gosselin, Haverhill, secretary-treasurer.

The program committee for the coming year will be Fletcher Wonson, Gloucester; Norman Peatman, Andover; Aubert Giles, Danvers; John Draper, Peabody and William Lane, Manchester.

It was decided the club should have a set of by-laws so Fletcher Wonson, Allyn Trask, Peabody and Henry T. Celcelski of Salem were appointed a committee on by-laws.

Sidney Johnston of Lynn was elected manager of the Christmas Decorations Show, to be held at the school December 10, 11 and 12. There will be a sale of decorations suitable for your table on Christmas. The Club is planning a very interesting program for the evening of December 10.

Pure dye silk burns with an odor of burning hair and forms tiny black balls. Silk heavily weighted with metal leaves a black crisp skeleton of

GARDEN CHAT

Have you ever tried growing plants in a hot bed or cold frame? Now is the time to build a frame if you are planning a bed for next spring.

Just what is the difference between a hot bed and a cold frame? A hot bed is heated artificially by means of manure, hot water, flue or electricity; while a cold frame receives only that which nature may provide from the sun.

Plan to build your frame in a sheltered place on the south side of a building, hedge, etc., where the prevailing winds will not trouble and the spring suns have an opportunity to beat in. A storm window might be used but a standard size hot bed sash is 3 ft. by 6 ft. At any rate, make the frame to fit the sash.

When a hot bed frame is desired, it is wiser to use 2 inch plank, while a cold frame might be built of 1 in. boards. The back side should be 4 in. higher than the front side so that the sash will slope to allow run off of water and best refraction of light. If you allow the bed boards to protrude an inch or two above the rest of the frame, you will find it an advantage when you ventilate your sash next spring. Have the low side towards the sun.

The frame may be built on top of the ground where it is level and bank the soil up against the sides to aid in retaining the heat within the bed and keeping the cold out. Sometimes folks go to the trouble of excavating the soil and then building the frame below the ground surface. This is not necessary. When this latter method is followed one should be sure to use the best soil to put back on top of the manure, etc., in which the seed and plants are planted. Remember that the soil cannot be too good for these little seeds and plants.

After the frames are completed and the soil banked up around the outside, fill the bed with leaves or straw manure to the top and place a board or two on top to prevent the wind from blowing them out. This fill material will keep the frost from working into the soil. When time comes to sow seed or to transplant seedlings into the bed, remove the leaves, etc., apply heat, and cover the frames with hot bed sash.

The three essential factors to keep in mind in operating a hot bed or a cold frame are temperature, watering, and ventilation. When these factors are practiced you would enjoy raising some of your own plants instead of buying them. Yes, how nice a large crisp head of lettuce and red radishes would taste next May that you grew yourself in your hot bed.

C. M. Stearns

EXTENSION DEPARTMENT

Prof. Arnold M. Davis, State Extension Horticulturist, is to be in Essex County January 18, 19 and 20; February 8-10! March 9 and 10. Any community interested in having Mr. Davis during this time, communicate with Mrs. Mary M. McIntire, Home Demonstration Agent, Hathorne.

WHEN YOU BUY MEAT

According to the last issue of the Consumer's Guide people should inquire as to which kinds of meat are selling at the lowest price at time of purchase; price the different cuts of meat; and note the proportion of waste to meat per pound.

Ask for meat grade-marked with the Government grading stamp which runs like a ribbon from shoulders to legs so that each cut is marked. The grade names are: for Beef, veal, mutton, lamb, first, prime; second, choice; third, good; fourth, medium; fifth, plain or common. For Pork, first, No. 1.; second, No. 2.; third, No. 3; fourth, No. 4.; fifth, No. 5.; and or Sausage, U. S. No. 1.

If there are no grade marks, look for these indications of high quality:

Beef—Flesh: Light cherry red in color, velvety in appearance, firm, fine-grained, minimum of connective tissue. Bones: Porous, pinkish white in color. Fat: Brittle, flaky, creamy white, marbled as a network through the meat.

Veal—Flesh: Fine grained, firm, somewhat moist, light pink; the lighter the flesh, the more evidence of tenderness. Bones: Soft, red, and small. Fat: White in thin layer over the exterior; pinkish on the interior of the carcass.

Calf—Flesh: Firm, fine grained, velvety, light tan to reddish brown in color. Bones: Soft, small, very red. Fat: Generous quantity, creamy white.

Lamb and Mutton—Flesh: Firm and fine grained; color varies from pink in lamb to dull red in mutton. Bones: Most important indication of age is the break joint just above the ankle, which breaks in four well defined, smooth, moist ridges in lamb; less well defined, more porous, dry ridges in yearling lamb; cut smooth joint in mutton. Fat: Creamy white or slightly pinkish in young lambs, becoming white in older animals.

Pork—Flesh: Light, grayish pink in color; firm, fine textured. Fat: Firm, white, marbled through meat.

REMEMBER

Remember, plants drink through their leaves as well as through their roots. They also take in air through their leaves, hence an occasional bath or spraying helps keep house plants healthy by freeing the leaves of dust.

Radio Broadcast WHDH

Did you listen to the second in the series of broadcasts that the Essex County 4-H club members gave on October 23, Mrs. Vera Underhill had charge, she was assisted by Mrs. G. Richard Abbott of Andover a 4-H leader there.

The girls who were on the program were Gloria Amiro and Hester Zeeman both of Gloucester, as well as Ruth Irene Wadsworth of Saugus. Ruth has already made a name for herself, she was a music delegate at the State Camp at Amherst last summer and was pianist of the orchestra while there.

She attended Camp Vail in September, the orchestra played at the camp too. Those in the orchestra are Irene Morse of Cambridge, violinist; Jeanne O'Sullivan, Billerica, 'cellist; Raymond Davis, Ludlow, trumpeter.

The next broadcast by an Essex County group will be on WHDH Saturday, November 27 at 12.45. Horace J. Shute will be in charge of this group.

Frank Rowinski of Haverhill was a member of the Massachusetts Poultry Judging team which went to New York to compete in the National Poultry Judging contest, at the Annual meeting of the Poultry Industries Exposition.

Frank has been a 4-H Club member for the past six years carrying the garden and poultry projects. He has been a member of the Essex County poultry judging team for two years and has won many prizes. The most recent prize he received was a medal which he won at the Eastern States Exposition for the second highest individual in a contest of over 50 boys. He was a member of the Massachusetts team last January when they competed against the New England team at the Boston Poultry Show.

Other members of the team which went to New York were: Bourcard Nesson of Westfield, Donald Yourell, Weymouth; and Norman Lawton, Foxboro. William R. Walker, Associate Country Club Agent from Hampden County and Earle H. Nodine of Amherst, Assistant State Club Leader, accompanied the team.

ONIONS AND POTATOES
IN FIFTY WAYS

Did you know that Miss May E. Foley, extension nutritionist at the Massachusetts State College has recently compiled a pamphlet with recipes for "Onions and Potatoes in Fifty Ways."

These leaflets are free, just write to the Mailing Room, Massachusetts State College, Amherst.

4-H CLUB NOTES

Two leaders' meetings have been held recently at the school. The annual meeting of the County leaders was held October 29. In the afternoon there were conferences led by Miss Tena Bishop and Miss Marion Forbes, both from the State College.

Following supper the annual business meeting was held with the president, Mrs. Leon Jordan of Groveland presiding. Mrs. Jordan was re-elected president for the coming year. The other officers are: Mrs. Florence Abbott, Andover, vice-president; Paul Corson, Saugus, secretary; Horace J. Shute, Methuen, treasurer; Mrs. Arthur Usher, Danvers, assistant treasurer.

Those elected to the executive board are: Silas Little, Newbury; Miss Marion Parker, Beverly; Walter D. Blossom, Saugus; Mrs. W. H. Cann, Danvers; Miss Clara Putnam, Andover; Mrs. Helen Myers, Essex; Mrs. Henry Albrecht, North Andover and Miss Edna Rundquist, Gloucester.

Mr. Lyle Ring of the State College had charge of the music during the evening and the guest speaker was Rev. S. Lawrence Johnson, pastor of the Crombie street church, Salem.

Leader's Conference

The next conference of the 4-H Club Leaders will be held at the school the afternoon and evening of December 9 with Miss Marion Forbes of the State College in charge of the clothing conference starting at 2 P. M. Mr. Melby Brady of the State College will have charge of the craft work in the evening.

Miss Forbes' programme for the coming conference follows:

The Leader and the Club Girl.
Looking Ahead with the Club Girl.
Your Part as a Leader.

Programs for Club Meetings.
Keeping Records.

The project:

4-H Garments Inside and Out,
First Steps with the Beginner.
Varying the 4-H Apron Pattern.
Placket Problems.
Contests of 1937 and 1938.

Miss Foley says the rule should be potatoes once a day and in many families it is wise to serve them two times a day. With the price of potatoes so low this fall homemakers should make use of many potatoes.

Many people use rice or macaroni as substitutes for potatoes and feel that these substitutes are just as good. This is a mistaken idea. While the substitutes are good sources of starch, potatoes are richer in vitamins and minerals. If they are cooked in the skins there is a goodly source of iron.

ESSEX FARMER AND HOME MAKER

VOL. 18

HATHORNE, MASS., DECEMBER, 1937

NO. 12

Graduation of the Class of 1937

There were three high spots during the past month at the school, the Thirteenth Annual Science Exposition, followed by graduation, the twenty-first. Eighty-five students receiving their diplomas and certificates.

Peabody Institute, Danvers was filled to capacity with proud parents and fond friends of the graduates. The orchestra under the direction of Instructor C. M. Wood opened the exercises, followed by invocation by Rev. Garfield Morgan of Lynn.

The essays this year were given by David Ellwell of Essex, entitled "Down through the years". Irene Snell of Beverly took for her subject "At Camp Mayanuk", this was the camp at which she and Priscilla Hopkins also of Beverly worked this past summer.

Walter W. Hichens of Middleton and Gilbert Freeman gave a very interesting dialogue of how they came to enter Essex Aggie, what they had done while at the school both in project work and extra-curricular work.

The Glee Club were especially fine this year, as well as the orchestra. Warren H. Towne one of the graduates gave two violin solos and he was accompanied by his mother Mrs. Walter H. Towne. Mrs. N. Woodbury Bragdon directed the Glee club and Norman Everett '38 was the pianist.

PRIZE WINNERS

There is always a great deal of interest in the awarding of the prizes. The first to be awarded by Director Smith were the Mr. Ralph S. Bauer prizes for excellence in Agricultural projects; first prize to Leavitt Moulton of Beverly; second, Earl DeVeau, Lynn; third Henry C. Smith, Saugus; fourth, Myron Eastwood, Methuen and fifth to Conrad Nollett of West Andover.

The judges this year were Harry L. Cole, Buxford; Archer Pierce, Peabody and Conrad Tronerud, Topsfield.

The Mrs. Ralph S. Bauer prizes for excellence in Homemaking projects went first to Lena Tela, Lawrence. The committee this year awarded the second prize to the project rather than one girl. Two girls worked on this project during the summer and their reports were so fine that the committee gave second prize to Irene Snell and Priscilla Hopkins both of Beverly. Third prize

(Continued page 4, col. 3)

Christmas Customs

The delightful customs which are a part of our celebration of Christmas have their origin in many lands. The custom of giving is as old as Christmas itself, going back to the first Christmas when the Wise Men brought gifts to the new-born King.

Today children associate gift giving with Saint Nicholas, or in America with Santa Claus. The real Saint Nicholas was a Bishop of Myra, who, on Christmas Eve tossed purses of gold through the windows of impoverished homes. In some parts of Italy the children believe that an old woman named Befana, brings the gifts they receive on Twelfth Night. The children of Puerto Rico believe that the three Wise Men riding on Camels bring the Christmas gifts.

The children of Holland were the first to hang up their stockings on Christmas eve. In France peasant children put out their wooden shoes believing that the Christ Child returns each Christmas bringing gifts. This same belief led to the custom of putting candles in the windows to guide the Christ Child on His Way.

There are many legends about the origin of the Christmas Tree, which made its first appearance in Germany. Prince Albert, husband of Queen Victoria, introduced into England the custom of decorating the evergreen at Christmas. The Christmas soon became very popular in England and in America.

The use of holly is likewise an old English custom. In pagan times the Britons regarded holly as a sacred plant. Later it was used as a part of the Church decorations for Christmas festivals. The old church records contain references to "holy berry" at Christmastide.

In early days of the New England colonies, the Puritans frowned on any celebration of Christmas. Gradually the old English customs crept into the colonies, until by the eighteenth century Christmas in New England was celebrated with all the merriment of Christmas in Old England.

Constance Lovett

CLASS OFFICERS

The officers of the class of 1937 are James Cashman of Peabody, president; Norbert White of Ipswich, treasurer. The faculty advisors: Miss Margaret R. Harris, Miss Bessie McKinjun, Mr. Roger W. Knowlton and Mr. Stanley Bennett.

Bright Displays For the Yuletide

Plant a permanent dwarf evergreen near the house, plant a spruce or fir in the corner of the backyard.

With inexpensive materials one can easily make beautiful decorations. In place of ordering wreaths for doors and windows or buying ready made decorations for mantelpiece and dining table, many are having fun making them.

As for materials any florist or nurseryman will sell evergreen trimmings at a few cents per pound, according to type wanted. Koster blue spruce will cost more than pasture juniper. Hemlock and fir are the two needle evergreens most desired to work with because of their grace and smooth character.

Evergreens both the needle and broad leaf are traditional Christmas decorations, their natural grace, simplicity and beauty as plants, branches, branch tips, cones or fruits seem to express the spirit of Christmas.

Conservationists have strongly advocated against ruthless destruction of nature's beauty for Christmas use and as a result much sprayed material in gold, silver, aluminum and cellophane have appeared to take their place in the decorative scheme.

There are many materials which may be used as Christmas greens without destroying the beauty of any specimen or spot. Many evergreens even on the home grounds can well be pruned and the tips removed and made into beautiful pieces.

Chamaecyparis, spruce, fir, juniper, all need pruning back and all work well in wreath, centerpiece, spray or basket.

A sharp knife or pair of shears, permission to trespass and remove material within reason are a good pastime to take a hike through the woods with the eyes open. In the swampy sections, white cedar may be found, on higher ground red cedar and common juniper both with their many blue berries, a few tips from each and a few pieces of pine, spruce or fir with their cones.

A branch of oak with acorns and cups, a few sprigs of bayberry, black alder, barberry, privet or snowberry fruit will give stock enough for many designs.

Cones picked up during the entire season as one travels through the woods will come in handy and may be brightened by shellac or varnish.

Continued page 3, col. 2)

Essex Farmer and Homemaker

HATHORNE, MASS.

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Hathorne, Mass.

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Secretary, R. H. Campbell	Topsfield

CALENDAR

- Dec. 17—School closes for Christmas recess.
- Dec. 21—County Dairy Committee, Room 28 at ECAS, 7:30 p.m.
- Dec. 28—Annual meet. Dairy Herd Improvement Assoc. Room 28 at ECAS, 7:30 p.m.
- Five Year Banquet, honor of five year 4-H Club members, Homemaking School.
- Jan. 3—School re-opens.
- Jan. 5—Mrs. Morley at ECAS, Parental Education study group.
- Jan. 5, 6, 7—Union Agricultural meetings, Worcester, Mass.
- Jan. 8—Boston Market Gardners Assoc. Inc. at ECAS.
- Jan. 11—Tree Wardens Meeting at ECAS, Room 28, 1:30 p.m.
- Jan. 13—Homemaking School, sound film "Meat for Thought".
- Jan. 19 and 20—Prof. Arnold M. Davis, "Preparing for Spring".
- Jan. 25—10 a.m. Herbert Lewis, Andover, Forestry Demonstration. 1:30 p.m., Thomas Colgan, Merrimac, Forestry Demonstration.

Prof. Arnold M. Davis, State Extension Horticulturist will be in Essex County January 19, 20; February 8, 9, 10, 23 and 24; and March 9 and 10. Communities interested please call Mrs. Mary McIntire, Home Demonstration Agent, Danvers 50.

BRAIDED BRACELETS FOR CHRISTMAS

With Christmas near at hand, an inexpensive article which is simply made, yet effective, may be a helpful idea.

Some interesting braided bracelets were made in the handcraft classes this year and make attractive Christmas gifts for girls. The material used is called gimp lacing, or by one firm, Artisanlance. It is an imitation leather lace and may be bought in several sizes, in many colors and is quite inexpensive.

A variety of lace introduced to the handcraft classes this year is known as large, round gimp and a very attractive type of spiral bracelet may be made from it as follows: Measure two strands, each two and one-half yards long, and one piece ten inches long for core, or the core may be made of a piece of ordinary picture wire.

To begin: Place strands so that they are pointing to four points of the compass.

Put strand with which you plan to start on the bottom, after making one knot (directions below), pull up almost tight and insert core in center, leaving about one inch of core below knot. Pull up tight and begin.

Directions for Knot.

Hold core between thumb and forefinger.

1st. Strand

Over 2, under 1, Hold strand down over thumb with 3rd and 4th fingers.

2nd. Strand

Over 2, under 1 and hold down in place.

3rd. Strand

Around core and through 1st loop, or loop of same color as 3rd strand if two colors are used. Hold in place.

4th. Strand

Around core and through both loops. Pull up knot by pulling opposite strands or strands of same color.

To avoid confusion, always start each new set of knots with same color with which you started.

Continue making a series of knots until bracelet is sufficiently long. Then overlap the ends of the core and knot over them until core is covered. End by inserting the ends of the lace into the braiding as inconspicuously as possible, using an awl, and clip off.

With jewelry as fashionable as it is this year, these bracelets make effective and inexpensive accessories.

Margaret R. Harris
Instructor Related Art.

BOSTON MARKET GARDNERS

The Boston Market Gardners Association Inc., will hold their January meeting at the Essex Aggie School, Saturday, January 8. Luncheon and social hour will be enjoyed at 12:30, followed by the business meeting at 1:30, after which "The story of the United States Coast Guard", a sound film, will be enjoyed. There will be a Squash contest.

HIGH HONORS TO LENA TELA

Lena Tela of Lawrence and a member of the graduating class of 1937, was the winner of three prizes, the Mrs. Ralph S. Bauer, first prize; the Abraham Krasker prize and awarded the Balfour plaque.

Three different groups of judges felt that Lena's work was outstanding. Her note book which she kept during the summer of her project was really beautiful.

Lena worked in her home city of Lawrence in the dressmaking shop of Mrs. Mary Corradino. In her note book which she kept from day to day she had snapshots of the shop, pictures of the dresses and gowns which she made with samples of the materials, and trimmings.

During the summer she made a beautiful green winter coat for herself and she tells of her experience at the furriers with a piece of fur which her mother gave her.

She said "I did not think much of it, although it was soft and seemed to be of good texture". Upon examination by the furrier he found it to be Manchurian Fox, a fur that has not been imported for twenty years. Lena's mother had had it fully that long. Her coat was on display early fall at the homemaking school. At present she is studying at State Teachers College, Framingham.

MEETING OF ESSEX COUNTY POULTRYMEN

The second meeting of the Essex County Poultry Association was held Wednesday evening, December 8, in the homemaking department of the Agricultural School. An excellent baked ham supper was served by the department and 63 were in attendance at the supper. The usual routine reports were made and these included the recommendations of the executive committee relative to the move to increase egg consumption in Massachusetts. Prof. F. H. Branch as the first speaker of the evening spoke on the value of poultry accounts, inasmuch as the complete statement involving an inventory as well as expenses and receipts, was necessary in order that poultrymen might know exactly where they stood.

Following Prof. Branch's talk, Mr. Warren P. Baker, director of research for the Charles M. Cox Grain Company was introduced. Mr. Baker used for his subject the role of diet in disease and pointed out that for certain diseases diet and drugs could offer no control or cure whatever, but that in other diseases diet did play a very definite part and it has become necessary to even consider the part of the country in which some feed ingredients are produced in order to determine the presence or absence of certain necessary minerals.

J. Stanley Bennett.

ESSEX FARMER AND HOMEMAKER

SUPPLEMENT

SCHOOL NOTES

DECEMBER, 1937

STUDENT EDITORS

Homemaking Department

Margaret Spinney, '38 Saugus
Helen Corliss, '38 Andover
Grace Mann, '38 Amesbury
Wyntha Tompkins, '38 Essex
Mary Anderson, '39 Peabody
Mildred Burke, '39 Methuen

Agricultural Department

Aubert Giles, '39 Danvers
Allan Trask, '38 Peabody
Walter Winn, Jr., '38 Methuen

F. F. A. Reporter

Leonard Duratti, '38 Swampscott

HIKING PROGRAM

During the week of the thirteenth Annual Science Exposition at the school, the gymnasium could not be used by the girls for basketball practice and physical education.

Instead of having various drill exercises, Miss McNamara, the girls' coach, planned a hiking program for the various classes in the school during their regular physical education period.

Most of the students enjoyed the hiking program, because at this time they had the opportunity to be out-of-doors during some part of the day. The hike was planned so that students were able to be back at the school in time to enter their next class session.

M. A.

F. F. A. ASSEMBLY

On Wednesday, December 1, the members of the Essex Chapter of Future Farmers enjoyed a talking picture which was presented through the courtesy of Mr. Williams of the Aetna Insurance Co. The reel dealt with the agencies that unite to protect American citizens from accidents due to carelessness and reckless driving on the highways.

At the close of the meeting Mr. Metcalf announced that the Master Budget would be submitted at the next meeting.

A. G.

PRIZE WINNER

Mary Anderson of Peabody, a member of the Junior A division, won two dollars for a prize recently. She entered the contest sponsored by the National Cheese Institute.

Each contestant submitted seven dinner menus using cheese for the main dish and the recipe for each of the seven cheese dishes.

THE ALUMNI MEET

The following classes held their reunions in the late afternoon: 1932 their fifth; 1927, tenth; 1922, fifteenth and the class of 1917 their twentieth.

At the dinner, Dr. Saul Freedman of the class of 1917 presented to Melville Grey of the board of trustees a bronze tablet with the names of those from the class of 1917 who have passed on. These are Thomas Clarence Bryson, Jr., Joseph Williams Hagerty, Edwin Dummer Hopkins and Leo Ranen.

Much credit should go to the officers of the Alumni association for the splendid program and enthusiasm. The dinner was held in the gymnasium and it was filled to capacity with 200 present. Late comers were obliged to wait while places were set for them.

The Director spoke of some of the plans which are being made for the observance of the twenty-fifth anniversary of the organization of the school which will be on October 1, 1938. At that time the new Athletic Field will be dedicated and it is hoped to make this a grand home coming for the more than 1200 graduates and the more than 3000 others who have attended the school sometime during the past twenty-five years but not stayed to graduate.

District Attorney Hugh A. Cregg was the guest speaker. He urged the Alumni to spread the news of the school throughout the county. He said it was not as well known in the northern part of the county as it should be. He said it was the duty and obligation of all to see that the school continues to grow.

At the business meeting which followed the speaking the following were elected as officers for the coming year: R. Burleigh Odiorne was re-elected president; Roger Lewis of Andover and Mrs. Marie Murray of Lexington elected vice-presidents; Horace J. Shute, Hathorne, secretary-treasurer.

Members of the executive board are Richard Murray, Lexington; Miss Mildred Russell, Danvers and Winslow Dunnells of Andover.

The Clothing leaders' training meeting held on Dec. 9 was well attended. Miss Marion Forbes was in charge and gave the leaders a great deal of valuable information. Grace Raimey from Mrs. H. J. Shute's Club in Methuen gave a demonstration of pattern fitting. Marylin Lewis had a wool suit and accessories on exhibit. Miss Forbes had the leaders make samples of plackets and seams.

CHRISTMAS CANDY MAKING

Candy making was taught in all classes in the Homemaking department for the benefit of the girls who want to give an assortment of candy away as gifts for Christmas or for themselves.

The girls made boxes to pack the candy in. These will be given to the girls at the end of school just before vacation. The kinds of candy made were fudge, penuche and peanut brittle and many others. Good fudge and penuche should melt in your mouth.

In making fudge and penuche all the sugar should be dissolved before starting to boil. Bring to boiling point, boil until firm ball is formed by a test in water. Stir occasionally. Remove from fire, pour on marble slab. Let cool, add vanilla and salt. Work until creamy with spatula, knead. Place in a greased pan until cold. Cut in squares.

Recipe for Peanut Brittle

One and one-half cup sugar, two-thirds cup corn syrup, two-thirds cold water, two tablespoons butter, one quarter teaspoon salt, one and one half to two and one half cups shelled raw Spanish peanuts, one half tablespoon vanilla, three-quarters tablespoon soda, one half tablespoon cold water.

Put sugar, corn syrup, and two thirds cup cold water in iron kettle, stir until mixture boils, cover and boil three minutes. Remove cover, and boil to 275 F., remove thermometer. Add butter and peanuts heated in oven, and salt and stir constantly about ten minutes or until peanuts are cooked. Remove from stove. Add vanilla and soda dissolved in one half tablespoon cold water. Stir to mix, and turn on slightly buttered marble slab or agate tray. Spread thinly as possible, and lift constantly while cooling, using spatula and pull to distribute nuts evenly. Flatten with palm of hand, and break in pieces.

M. S.

SOIL CONSERVATION PROGRAM

Supervisors are finishing the final check-up for the 1937 Program which closed, so far as the farmers' work is concerned on December 1. They will be through the check-up in ten days.

Arrangements are under way for the 1938 program which has several different features. On December 13 at 2 P. M. the Potato Growers held a meeting at the Essex County Agricultural school to discuss the program as it concerned them. On the 15th the Vegetable growers held an evening meeting at the school at which time they discussed their phase of the program.

LIST OF GRADUATES

Melville Grey vice-president of the board of Trustees and also a member of the class of 1917 awarded the diplomas to the graduates. He said that "Man's ability to adapt himself, more important than previous education".

Diplomas were awarded to 36 boys in the Agricultural department, they were, Bruce W. Bowden, Amesbury; Gilbert C. Freeman, Donad E. Gasper, Paul E. St. Linger, Warren H. Towne, and John J. Slattery, Gildo Santi, Beverly; David F. Elwell, Essex; Ernest S. Griffin, Gloucester; Norbert V. White, Hamilton; Joseph Blunda, Ipswich; Archie F. Buder, Francis X. Gillen, William A. Long, Augustine J. Sheehy, Lawrence; Walter H. Alley, Jr., Frank J. Conti, Merle G. Graffam, James J. O'Neil, Lynn; Clayton F. Teague, Marblehead; Louis Rosi, James P. Webber, Walter W. Hichens, Middleton; Thomas A. Nimmo, Methuen; James J. Keane, Francis C. Killilae, Nahant; David Rennie, Jr., Henry M. Smolak, Theodore M. Smolak, North Andover; James L. Cashman, George A. Foster, John E. Fullington, Charles F. Ward, Peabody; Warren B. Kneeland, Salem; William A. Moore, Salisbury; Russell Wonsen, Rockport. A post-humous certificate was given to the parents of Anthony Dichirico of Swampscott.

In the Homemaking school 24 diplomas were awarded to the following girls: Edna M. Wilmot, Beverly; Edna Bowers, Phyllis E. Marks, Barbara L. Clark, Lynn; Yolanda Scamperino, Lena M. Tela, Lawrence; Phyllis R. Steele, Florence E. Woodbury, Middleton; Demyra C. Briggs, Methuen; Elizabeth J. Colby, Winifred M. McKay, Elinor F. Senior, Newbury; Helen Lucas, Hilda L. Putnam, Peabody; Marjorie E. Perry, Amelia Tataronis, Salem; Beverly E. Bird, Marjorie A. Colby, Elizabeth S. Hawkes, Saugus; Charlotte Moore, Salisbury; Ruth L. Graff, Rowley; Shirley W. Hagar, Wenham; Eva R. Deloge and Anna M. Gioco, North Andover.

There were 24 certificates awarded to students from the Homemaking school. These are girls who took the one year course, most of them are graduates of high schools and were in the High School Special course. These are: Priscilla L. Hopkins, Edith May Stevens, Alice F. Woodberry, Irene Snell, Beverly; Ruth E. Cann, Ethel F. Ross, Louise E. Spofford, Evelyn J. Watson, Danvers; Mildred I. Dick, Bertha E. Foley, Lawrence; Ruth E. Martin, Lynn; Mary L. Minichello, Ipswich; Anna M. Bennett, Methuen; Evelyn J. Jaques, Newbury; Ruth Ashton, Josephine W. Reilly, Janet E. Spalding, Newburyport; Helen P. O'Hearn, Rockport; Elizabeth A. Pyburn, Dorothy E. Page, Doris G. Dorgan, Margaret I. Skinner, Peabody; Elsa A. Robblee, Salisbury; Ruth M. Trone-rud, Topsfield.

HOLIDAY PROJECTS

Foods

It has been the custom in the Homemaking department to teach the students in the various classes how to make attractive Christmas gifts that they may use as personal gifts or give to some deserving children.

The more advanced students made the more difficult kinds of candy. It was boxed to illustrate the packing of candy in an attractive way.

Art

The boxes that were used for the candy were made in the art classes. The paper for these was a light green. Green and red metallic paper was used for the trimmings, leaves of the green with red berries of the red. About 140 boxes were made.

Toy Unit

Mrs. Roundy organized a very interesting project, with the Senior groups and High School divisions. The girls made rag dolls, little dogs and other stuffed animals. They dressed dolls and old toys were renovated and made useful. About 75 girls were in this project.

Handcraft

The Juniors worked on block prints for their projects. They were made into Christmas cards, different designs were chosen and stamped on various colored papers. They were folded in such a way that an envelope was formed and the design or picture was on the inside.

Clothing Projects

The Freshmen made aprons, they applied to these different figures in applique. Later they made pot holders which also were made in applique.

Six of the Junior B class made children's dresses to be used as gifts for deserving children. Each girl chose the pattern and color of the material that she was to use making her particular dress. The collars and cuffs were of original designs made by the students.

M. A. and M. A. B.

SCHOOL JUDGING TEAMS ARE WINNERS

As the Farmer went to print last month six teams of boys from the school went to the State College for the interscholastic judging contests. Instructors Kenneth Forman, C. M. Stearns and C. M. Wood accompanied the boys.

The results were as follows: Milk team won first individual, John Ziel-ski, Peabody, winner. Also first team prize, team was Zeilski, Russell Weinhold, Methuen, Percy Curtis, Rockport and Myron Eastwood was alternate.

Livestock team won third team prize: George Georgeantis, Lynn; Jacob Ranta and John Balzarini both of Rockport. Chester Silva of Rockport was alternate.

Fruit team, won first individual prize, Thomas Dederian of Methuen, winner; also third team prize with

AFTER THOUGHTS

Another season of football has passed into history. What-ever the reason for our several defeats, we do admire the long, hard, grind the Aggie boys have had to endure. There are many things which stand in the way of a successful football team, at this school and only those who know the difficulties involved, can really appreciate the work of the players.

Perhaps with the opening of the new playing field in 1938 our Aggie team will come out on top. In spite of the difficulties encountered during the past season, one thing is certain, the boys did their best and didn't quit.

L. M. '38

BASKETBALL

With old man winter gradually taking control, football has faded out of the picture and basketball again looms to the front.

Coach Couhig has devised a plan by which more boys will be able to play in competition with other schools. He has organized a squad which will be known as the "Prep" school squad. This squad consists of boys who are over nineteen years old and therefore will be ineligible to play against the majority of high schools.

Some of the veterans of last year who are on this squad are Georgantis, Munroe, Ranta, Sano, Prophet and Wilson. Their schedule will include such teams as Stockbridge, Gloucester, Boston Boys' Club, and some of the strong high school quintets.

There will be a first and second high school squad. Tataronis and Kelley are two returning veterans of this squad. Their schedule will include Manchester, Ipswich, and Methuen and others.

The "Prep" squad opened its season December 7, playing Tufts Junior Varsity.

The high school schedule will start after the Christmas recess. The schedules of all the teams will be announced later.

A. T.

Dederian, Paul Kelley, Lynn and Elmer Luxton of Wenham with Lloyd Briscoe of Groveland alternate.

Vegetable team won third individual prize, Robert Spencer of Danvers, winner; also fourth team prize, with Spencer, Walter Tataronis, Peabody; and James Barnes of Methuen.

Poultry team won first individual prize by Paul Day of Saugus, and third team prize with Day, Chester Silva of Rockport and Algerd Ramaika of Haverhill.

Ornamental plant materials won third individual prize, by Howard Wilson, Jr., of Beverly; fourth by Allyn Trask of Peabody, and the team won second prize with Wilson, Trask and Joseph Arnold of Gloucester.

Rhea L. Gosselin

SCIENCE EXPOSITION

The Thirtieth Science Exposition was held the latter part of November with many exhibitors. Henry Carver Smith of Saugus was awarded the plaque for the best exhibit of the show.

The climax of the four days was the annual Science Day joint assembly in the assembly hall. The orchestra of the school under the direction of Instructor Wood opened the program. Mr. Mostrom introduced Jacob Ranta, president of the F. F. A. who presided and introduced Director Smith.

The guest speaker of the afternoon was Bradford Williams, field secretary of the Massachusetts Trust for the Preservation of places of natural and historic interest. He showed over sixty slides of beautiful as well as historical places in Massachusetts. A number of them were from our own Essex County. Many of the slides were colored, which added to their beauty.

Because of the lateness of the hour when the program was over and a dance was to be held immediately after, the awarding of the prizes was held over for morning assembly two days.

The prizes went to: William Corning, for best exhibit related to plant growing, this was a book. A book to John Kukene for best exhibit related to fruit growing. A book to Robert Corneliusen for best exhibit related to ornamental horticulture.

One year's subscription to "Horticulture" and a membership in the Horticulture society, went to Francis O'Connor for best herbarium.

The judges in the above were Instructors Dacy, Metcalf, and County Agent Francis C. Smith.

Space will not allow for giving the classes in which others received their prizes, but those receiving ribbon prizes were: Rhea Gosselin, Howard Stone, Jr., Charles Currier, Aubert Giles, Clarence Mitchell, Elmer Luxton, John Wadsworth, Leonard Duratti, Paul Day, John Draper, Frank Story, Warren Nelson, Donald Kelley, Nicholas DiLisio, Paul Parker, Walter Hichens, Elmer Thomas, Jr., Sidney Johnston, Barbara Metzger, Gerard Hamel, Clifford Nelson, John Fay.

Myron Eastwood, Walter Winn, Willis Lord, Peer P. Johnson, Jr., Hope Crombie, Norman Peatman, Alerson Noyes, Gerald Wood, Richard Mulally, William Golden, Edward Croteau, Edward Richard, Frank Lane, Martin Sevoian, Leavitt Moulton, Walter Tataronis, Conrad Nolett, Charles True.

Gold, Silver and Bronze medals were awarded to those with high score in three contests, Trees, Weeds and choice of one from five others contests. These were won by John Zielski, first; Myron Eastwood, second; and Clarence Mitchell, third.

LIGHT FRUIT CAKE

If you have been busy and not had time to make that fruit cake which requires several weeks to mellow before it is ready to eat here is one that you can make to day and it is ready for use tomorrow.

One cup butter, one and one half cups of sugar, one whole egg and the yolks of three other eggs, one cup sweet milk, one pound raisins, one quarter pound of citron cut fine, one quarter pound of cherries cut once, two and one half cups bread flour, sift before measuring, one and one half teaspoons baking powder, flavor with lemon and nutmeg. Bake in a slow oven one and one half hours. Not so long if made in small pans.

This can be made in those small pans and wrapped in cellophane and tied with ribbon and given as gifts.

If you wish other fruits in your cake any mixture so long as you keep the weight the same.

BRIGHT DISPLAYS FOR THE YULETIDE

(Continued from page one)

They may be gold or silver plated but very, very few should be so disgraced.

To make a wreath, the easiest method is to secure a moss filled wreath frame from a florist or cemetery superintendent, sharpen ends of short length evergreen tip pushing them into frame in desired position.

To make a wreath frame use a piece of willow, privet, wisteria, forsythia or 14 gauge soft iron wire, bending and securing them to the desired size, about twelve inches in diameter. A spool of 22 gauge wire, shears and pliers, complete equipment necessary.

Clip evergreen material into pieces six, eight and ten inches long, take one or more pieces lay them on the wire, tips on slight angle away from ring. Then wrap or tie securely to wire or wood, a second bunch same as the first is laid on overlapping first about one-third, continue to wind and keep winding tight, (tight tying means successful wreath making). This procedure of laying on, lapping, tying is continued working from left to right around entire circumference of frame leaving no gaps. Clip off any rough edges to make the whole compact and even.

Now add the decorations, cones, berries or what not, wire them securely and fasten solidly, a firm solid wreath is always more attractive than a floppy, sloppy one.

A Christmas spray may replace the wreath and is made by taking one strong branch as a basis, facing it with other materials fastened in same manner as when making a wreath.

Do something to make Kris Kringle open his eyes and shout with glee.

C. S. Wright.

GARDEN CHAT

Changeable weather during this season of the year offers serious problems for the gardeners who store vegetables for winter needs. It gets too warm and then it becomes too cold very suddenly.

The outside storage should have plenty of covering to prevent freezing during the low temperature periods. There should be some outlet available for stagnant air and heat created from the stored products to escape. Either a flue pipe or some hay protruding from a small storage pile will take care of these needs. With an inside storage room the problem is somewhat the same,—the ventilators should be left open during the night to change and let in the cool air, while during the day the ventilators should be closed.

Have you plowed under weeds and corn stubble in your gardens? Insects take advantage of all these opportunities and winter over in this refuse only to hibernate next spring and cause more destruction to your crops. Why not destroy these insects now and help reduce next year's damage. If you have only a small back yard garden, pull up the old refuse remaining and build a compost pile in the far corner of your yard. If you add some ground limestone to this pile, you will find that it decomposes more rapidly. Build your pile so that the sides are fairly straight and the top is slightly sunken towards the center to allow water to work into the pile and aid the breaking down process.

Are there any signs of weevils in the beans you are saving for seed or for cooking purposes? If so, the seed should be placed in an air tight container and then pour one (1) teaspoonful of carbon disulphide for every gallon of beans, on a piece of rag or dish set in on top. The lid should be placed lightly on and allow to set for 24 hours. Remove seed and air thoroughly.

Note: Carbon Disulphide is inflammable and its vapor is explosive. Keep it away from fire.

C. M. Stearns

PARENTAL EDUCATION GROUP MEETS

The third in a series of Parental Education study group meetings under the direction of Mrs. Ruth D. Morley, State Parental Education Specialist was held Wednesday, December 15, at the School.

Luncheon was served to the group at the Homemaking school, after which they returned to the discussion of problems.

The next meeting of the group will be held at 10:30 at the School January 5, luncheon will be served in the Homemaking school at noon.

FRUIT PROGRAM ADOPTED

The Essex County Fruit committee met recently and adopted a program of extension work in co-operation with the Essex County Agricultural School and the Massachusetts State College. Chairman Archer Pierce, Peabody; clerk, Bradford Webb, Wenham; C. M. Wood, Danvers; G. Richard Abbott, Andover; Wallace Standley, Saugus; Gilbert Wallace, Bradford; John Kachadarian, Methuen; H. C. Colcord, and F. A. Bagely of West Newbury; William A. Russell of North Andover, comprise the County Fruit committee.

The program adopted was largely the result of a survey made by the County Agent. A score card for scoring orchards was adopted, it is hoped to secure five fruit growers to keep cost records on their orchards in 1938. Two orchardists agreed to secure some Clonal stocks and try them out. Recommended that spray service be continued as previously but co-operate with the new radio station WLAW at Lawrence in timing sprays.

Twilight meetings: One a week during the critical spring sprays were recommended.

Study group: A meeting in December to discuss value of new varieties with Director Smith and Prof. Thies leading discussion and using specimens to illustrate; motion picture film showing labor saving devices.

Discussion groups with growers themselves as leaders: Archer Pierce, C. M. Wood, Harry Seagrave and others as leaders.

Discussion of storage problems by Prof. Cole and a symposium on marketing by fruit growers themselves. One meeting for a discussion of small fruit growing, a special Farmer's Day program to be discussed at the December 29 meeting.

EVENING SOILS COURSE

Have you often wondered why it is that some plants do well on a certain soil and not on others? Or why it is that radishes crack open, or celery cracks, or why beets do not do well on certain soils, or dahlias?

Soils and their influence upon crops is a very important and sometimes a limiting factor. We find actually that Alfalfa is growing successfully on but five soil types in Essex County. Why?

To answer questions of those who are interested in these problems, the Essex County Agricultural School has arranged for an evening course in Soils, at the School, to begin after the first of the year. Twelve lessons, one a week for twelve weeks. A text book, notebook, etc., will be furnished all for a small fee for the course.

The size of the class will be limited so if you are interested, write to County Agent F. C. Smith, Hathorne, and further details will be mailed to you.

4-H CLUB NOTES

Hannah Hay of Lawrence has been chosen to attend State Camp in 1938 as Essex County Canning delegate. Hannah has been an outstanding club member for six years and has done some exceptional work in the canning and clothing projects.

—X—

A very excellent club meeting was conducted by Mrs. H. J. Shute in Methuen last month. Mrs. Shute has one Clothing and one Food club. The mothers were invited to attend and twelve turned out for the meeting. The Food girls gave a demonstration on the correct and incorrect way to dress for cooking. The Clothing girls gave a demonstration of pattern fitting. "The tale of a Dish Towel" was also given. Reports of the Clubs' activities were given and songs were sung. Refreshments added the final touch to a very fine meeting.

Let's have more reports like this.

—X—

The Fifth year banquet will be held on Tuesday, December 28 at 6:30 p.m. at the Essex Aggie School. This will be another big event in the 4-H Club program for 1937 and '38. On that day we will honor all club members who have reached the halfway mark to adulthood.

The Essex County Service Club is sponsoring this third 4-H club banquet for the five year members.

An interesting program is expected to be enjoyed, dancing will follow the entertainment.

Service club members, former club members, and local leaders and parents are invited to attend the banquet. Tickets will soon be out.

—X—

On January 21, 1938, Miss Tena Bishop and Mrs. Underhill will visit the food leaders in the County. Any leader wishing to hold a meeting at that time, notify the County office and we will gladly arrange it.

4-H DAIRY WINNERS
ANNOUNCED

Winners of the 1937 dairy contests for 4-H club members were recently announced by Harley A. Leland of the Massachusetts State College, assistant club leader.

Those from Essex County who were awarded with a tour of eastern Massachusetts were Everett Amidon, Amesbury; Lyman Orcutt, West Newbury; Ralph Woodworth, also from West Newbury.

More than 100 boys from all sections of the state attended the annual 4-H judging contests in dairy, poultry and vegetables at the State College November 12 and 13. Frank Rowinski of Haverhill was third with 620 points out of a possible 700.

NEW 4-H CLUBS

The following girls clubs have been organized in the County for 1938.

Andover—2 Health Clubs, 1 Book Lovers Club, 3 Clothing Clubs, 1 Yarn Club, 1 Homecraft Club, 1 Dramatic Club, 1 Poster Club, and 1 Red Cross Club.

Ballardvale—1 Home Furnishing Club.

No. Andover—1 Clothing Club, 1 Food Club and 1 Home Furnishing Club.

Groveland—2 Clothing Clubs.

Danvers—1 Home Furnishing Club, 2 Clothing Clubs.

Gloucester—1 Food Club.

Ipswich—1 Food Club.

Methuen—2 Clothing Clubs and 1 Food Club.

Saugus—1 Craft Club and 4 Clothing Clubs.

Newbury—1 Clothing Club.

Swampscott—2 Clothing Clubs.

Beverly—Food and Clothing Clubs are being organized this month.

GRADUATION OF THE CLASS
OF 1937

(Continued from page one)

went to Barbara Clark, Lynn; fourth, Doris Dorgan, Peabody and fifth to Winifred McKay, Byfield.

The judges were Mrs. George L. Hodsdon, Gloucester, Mrs. Charles Ropes, Salem and Mrs. Hugh A. Cragg, Methuen.

The Abraham Krasker prizes for excellence in English went to Carroll I. Killillae, Nahant; and Lena Tela, Lawrence.

The special award in memory of Roger Wheaton ex-1936 to Bruce Bawden of Salisbury.

The Balfour prize for scholarship, loyalty and achievement went to Gilbert Freeman of Beverly and Lena Tela, Lawrence.

The Alumni prizes were awarded by president of the association, R. Burleigh Odiome, they are given each year for the greatest improvement in academic work while in the school, these were given to Louis Rosi, Middleton and Anna Gioco, North Andover.

James Cashman president of the graduating class presented to the school a section of cement walk with the class numerals in copper inlaid and a sum of money. They also gave a prize to a member of the class of 1938 for outstanding work in memory of one of their classmates who passed away last year, Anthony DiChirico of Swampscott. William Corning, of Beverly and president of the class of 1938 was the winner.

Rev. Garfield Morgan of Lynn was the guest speaker. He took for his subject "Living with ourselves". Among the things he said were these words "Keep faith with Life and Life will keep faith with you."

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